



AMERICAN TOWER®
CORPORATION

This report was prepared for American Tower Corporation by



Structural Analysis Report

Structure : 300 ft Guyed Tower
ATC Site Name : FALLING CREEK FL,FL
ATC Site Number : 24516
Engineering Number : 13973819_C3_03
Proposed Carrier : T-MOBILE
Carrier Site Name : I75 at I10 Boomer
Carrier Site Number : 9JK0218A
Site Location : Huntsville Church Rd
Lake City, FL 32055-7044
30.2507, -82.7443
County : Columbia
Date : March 31, 2022
Max Usage : 47%
Result : Pass



Prepared By:

Shahad Haji
POD

Reviewed By:



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Introduction

The purpose of this report is to summarize results of a structural analysis performed on the 300 ft Guyed tower to reflect the change in loading by T-MOBILE.

Supporting Documents

Tower Drawings	FWT Job #21618000, dated June 30, 2000
Foundation Drawing	Putnam Project #T99-G-208, dated July 7, 2000
Geotechnical Report	N&A Project #T99-G-208, dated October 21, 1999

Analysis

The tower was analyzed using American Tower Corporation's tower analysis software. This program considers an elastic three-dimensional model and second-order effects per ANSI/TIA-222.

Basic Wind Speed:	117 mph (3-second gust)
Basic Wind Speed w/ Ice:	30 mph (3-second gust) w/ 0.25" radial ice concurrent
Code:	ANSI/TIA-222-H / 2018 IBC / 7th ED (2020) Florida Building Code
Exposure Category:	C
Risk Category:	II
Topographic Factor Procedure:	Method 1
Topographic Category:	1
Spectral Response:	$S_s = 0.09$, $S_i = 0.05$
Site Class:	D - Stiff Soil - Default

Conclusion

Based on the analysis results, the structure meets the requirements per the applicable codes listed above. The tower and foundation can support the equipment as described in this report.

If you have any questions or require additional information, please contact POD Group via email at bsmith@podgrp.com. Please include the American Tower site name, site number, and engineering number in the subject line for any questions.

Existing and Reserved Equipment

Elev. ¹ (ft)	Qty	Equipment	Mount Type	Lines	Carrier
300.0	9	Antel RWA-80016CF ____	Sector Frame	(9) 1 5/8" Coax	ALLTEL COMMUNICATIONS, LLC
250.0	3	Ericsson Radio 4480 B71+B85A	Sabre C10857001C Sector Frame	(2) 1 5/8" Coax (2) 1.99" (50.7mm) Hybrid	T-MOBILE
	3	Ericsson Radio 4460 B25+B66			
	2	Gabriel P-24A36G+-U			
	3	Commscope FFVV-65C-R3-V1			
175.0	1	Ceragon FibeAir RFU-C	Leg	(1) 7/8" Coax	
	1	Ceragon 1500HP/RFU-HP			
	1	Andrew Microwaves HPX6-59-P3A/K			

Equipment to be Removed

Elev. ¹ (ft)	Qty	Equipment	Mount Type	Lines	Carrier
No loading was considered as removed as part of this analysis.					

Proposed Equipment

Elev. ¹ (ft)	Qty	Equipment	Mount Type	Lines	Carrier
250.0	3	Ericsson AIR 6419 B41	Sabre C10857001C Sector Frame	-	T-MOBILE

¹ Contracted elevations are shown for appurtenances within contracted installation tolerances. Appurtenances outside of contract limits are shown at installed elevations.

Structure Usages

Structural Component	Controlling Usage	Pass/Fail
Legs	36%	Pass
Diagonals	20%	Pass
Horizontals	47%	Pass
Guys	39%	Pass

Foundations

Reaction Component	Analysis Reactions	% of Usage
Base Axial (kips)	162.7	23%
Anchor 1 Uplift (kips)	67.2	11%
Anchor 1 Shear (kips)	65.2	8%

The structure base reactions resulting from this analysis were found to be acceptable through analysis based on geotechnical and foundation information, therefore no modification or reinforcement of the foundation will be required.

Deflection, Twist and Sway*

Antenna Elevation (ft)	Antenna	Carrier	Deflection (ft)	Twist (°)	Sway (Rotation) (°)
250.0	Ericsson AIR 6419 B41	T-MOBILE	0.094	0.013	0.056
	Gabriel P-24A36G+-U				
175.0	Andrew Microwaves HPX6-59-P3A/K		0.050	0.010	0.042

*Deflection, Twist and Sway was evaluated considering a design wind speed of 60 mph (3-Second Gust) per ANSI/TIA-222-H

Standard Conditions

All engineering services performed by POD Group are prepared on the basis that the information used is current and correct. This information may consist of, but is not limited to the following:

- Information supplied by the client regarding antenna, mounts and feed line loading
- Information from drawings, design and analysis documents, and field notes in the possession of POD Group

It is the responsibility of the client to ensure that the information provided to POD Group and used in the performance of our engineering services is correct and complete.

POD Group assumes that all structures were constructed in accordance with the drawings and specifications.

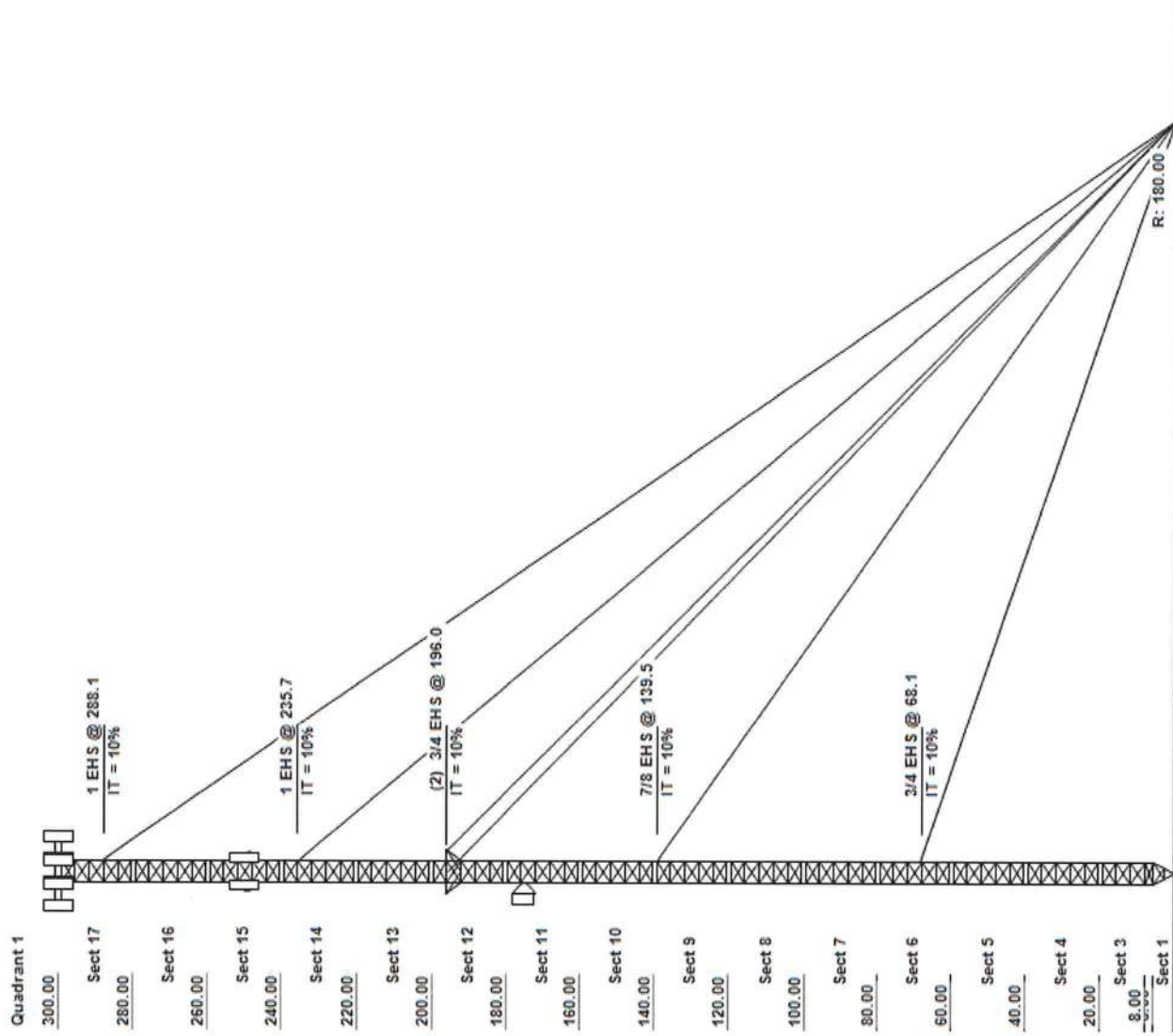
All connections are to be verified for condition and tightness by the installation contractor preceding any changes to the appurtenance mounting system and/or equipment attached to it.

Unless explicitly agreed by both the client and POD Group, all services will be performed in accordance with the current revision of ANSI/TIA-222.

All services are performed, results obtained, and recommendations made in accordance with generally accepted engineering principles and practices. POD Group is not responsible for the conclusions, opinions and recommendations made by others based on the information supplied herein.

Asset: 24516, FALLING CREEK FL
Client: T-MOBILE
Code: ANSI/TIA-222-H

Height : 300 ft
Base Width : 4 ft
Shape : Triangle



SITE PARAMETERS

Nominal Wind : 117 mph wind with no ice Exposure : C Site Class : D
Ice Wind: 30 mph wind with 0.25" rad Topo Method: Method 1 Risk Cat : II
Service Wind : 60 mph Serviceability Topo Feature : S_s : 0.086 S₁ : 0.051

SECTION PROPERTIES

Section	Leg Members	Diagonal Members	Horizontal Members
1 - 5	SOL 50 ksi 2 3/4" SOL	SOL 50 ksi 5/8" SOLID	SAE 36 ksi 2X2X0.1875
6 - 8	SOL 50 ksi 2 1/2" SOL	SOL 50 ksi 5/8" SOLID	SAE 36 ksi 2X2X0.1875
9 - 11	SOL 50 ksi 2 3/4" SOL	SOL 50 ksi 3/4" SOLID	SAE 36 ksi 2.5X2.5X0.1875
12 - 14	SOL 50 ksi 2 3/4" SOL	SOL 50 ksi 7/8" SOLID	SAE 36 ksi 2.5X2.5X0.25
15	SOL 50 ksi 2 1/4" SOL	SOL 50 ksi 7/8" SOLID	SAE 36 ksi 2.5X2.5X0.25
16	SOL 50 ksi 2 1/4" SOL	SOL 50 ksi 3/4" SOLID	SAE 36 ksi 2.5X2.5X0.1875
17	SOL 50 ksi 2" SOLID	SOL 50 ksi 3/4" SOLID	SAE 36 ksi 2.5X2.5X0.1875

REDUNDANT SECONDARY BRACING

Section	Sub Diag 1	Sub Horiz 1	Sub Diag 2	Sub Horiz 2	Sub Diag 3	Sub Horiz 3
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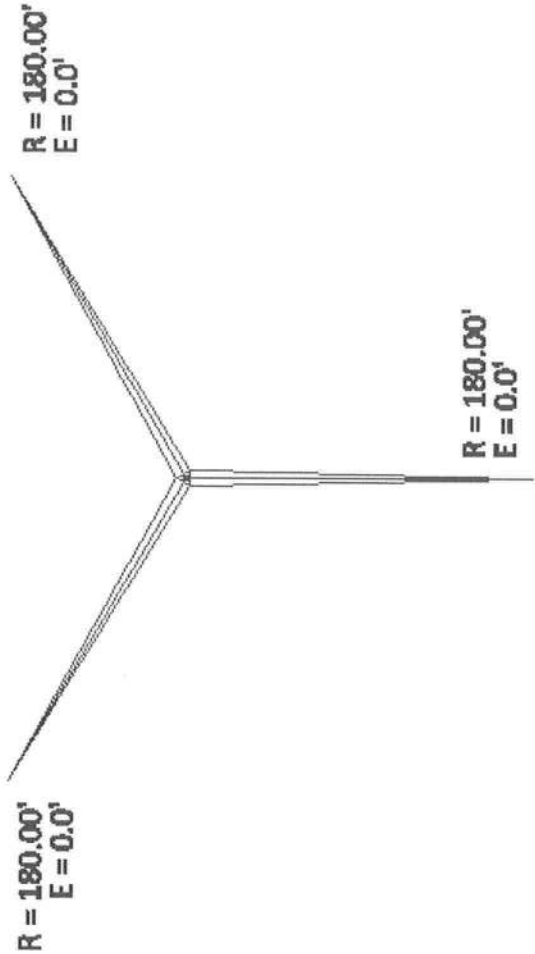
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DISCRETE APPURTENANCE

Elev (ft)	Type	Qty	Description
300.00	PANEL	9	Antel RWA-80016CF
300.00	Sector Frame	3	Generic Flat Light Sector Fram
250.00	DISH-GRID	2	Gabriel P-24A36G+-J
250.00	Other	3	Sabre C10857001C Sector Frame
250.00	PANEL	3	Ericsson AIR 6419 B41
250.00	PANEL	3	Commscope FFVV-65C-R3-V1
250.00	RRU/RRH	3	Ericsson Radio 4460 B25+B66
250.00	RRU/RRH	3	Ericsson Radio 4480 B71+B85A
196.00	Other	1	Torque Arms
175.00	DISH-HP	1	Andrew Microwaves HPX6-59-P3A/
175.00	Radio/ODU	1	Ceragon FibeAir RFU-C
175.00	Radio/ODU	1	Ceragon 1500HP/RFU-HP

LINEAR APPURTENANCE

Elev (ft)	From	To	Qty	Description
0.00	0.00	300.00	9	1 5/8" Coax
0.00	0.00	250.00	2	1.99" (50.7mm) Hybrid
0.00	0.00	250.00	2	1 5/8" Coax
0.00	0.00	175.00	1	7/8" Coax



GUY ANCHOR DESIGN LOADS				
Radius (ft)	Drop (ft)	Azimuth (o)	Uplift (kip)	Shear (kip)
180.00	0.00	0	67.11	65.23
180.00	0.00	120	67.15	65.23
180.00	0.00	240	67.15	65.23

GLOBAL BASE FOUNDATION DESIGN LOADS	
Vertical (kip)	Horizontal (kip)
162.72	1.89

ASSET: # 24516, FALLING CREEK FL
CUSTOMER T-MOBILE

STANDARD ANSI/TIA-222-H
ENG NO.:

ANALYSIS PARAMETERS

Location:	Columbia County, FL	Height:	300 ft
Type and Shape:	Guyed, Triangle	Base Elevation:	0.00 ft
Manufacturer:	Undetermined	Bottom Face Width:	4.00 ft
Kd	0.85	Top Face Width:	4.00 ft
Ke:	0.99		

ICE & WIND PARAMETERS

Exposure Category:	C	Design Wind Speed Without Ice:	117 mph
Risk Category:	II	Design Wind Speed with Ice:	30 mph
Topographic Factor Procedure:	Method 1	Operational Windspeed:	60 mph
Topographic Category:	Flat	Design Ice Thickness:	0.25 in
Crest Height:	0 ft	HMSL:	154 ft

SEISMIC PARAMETERS

Analysis Method:	Equivalent Lateral Force Method		
Site Class:	D - Stiff Soil	Period Based on Rayleigh Method (sec):	0.59
T _L (sec):	8	P:	1.3
S _s :	0.086	S ₁ :	0.051
F _a :	1.600	F _v :	2.400
S _{ds} :	0.092	S _{d1} :	0.082
		C _s :	0.031
		C _s Max:	0.046
		C _s Min:	0.030

LOAD CASES

1.2D + 1.0W Normal	117 mph wind with no ice
1.2D + 1.0W 60°	117 mph wind with no ice
1.2D + 1.0W 90°	117 mph wind with no ice
1.2D + 1.0W 120°	117 mph wind with no ice
1.2D + 1.0W 180°	117 mph wind with no ice
1.2D + 1.0W 210°	117 mph wind with no ice
1.2D + 1.0W 240°	117 mph wind with no ice
1.2D + 1.0W 300°	117 mph wind with no ice
1.2D + 1.0W 330°	117 mph wind with no ice
1.2D + 1.0Di + 1.0Wi Normal	30 mph wind with 0.25" radial ice
1.2D + 1.0Di + 1.0Wi 60°	30 mph wind with 0.25" radial ice
1.2D + 1.0Di + 1.0Wi 90°	30 mph wind with 0.25" radial ice
1.2D + 1.0Di + 1.0Wi 120°	30 mph wind with 0.25" radial ice
1.2D + 1.0Di + 1.0Wi 180°	30 mph wind with 0.25" radial ice
1.2D + 1.0Di + 1.0Wi 210°	30 mph wind with 0.25" radial ice
1.2D + 1.0Di + 1.0Wi 240°	30 mph wind with 0.25" radial ice
1.2D + 1.0Di + 1.0Wi 300°	30 mph wind with 0.25" radial ice
1.2D + 1.0Di + 1.0Wi 330°	30 mph wind with 0.25" radial ice
1.2D + 1.0Ev + 1.0Eh Normal	Seismic
1.2D + 1.0Ev + 1.0Eh 60°	Seismic
1.2D + 1.0Ev + 1.0Eh 90°	Seismic
1.2D + 1.0Ev + 1.0Eh 120°	Seismic
1.2D + 1.0Ev + 1.0Eh 180°	Seismic
1.2D + 1.0Ev + 1.0Eh 210°	Seismic
1.2D + 1.0Ev + 1.0Eh 240°	Seismic
1.2D + 1.0Ev + 1.0Eh 300°	Seismic
1.2D + 1.0Ev + 1.0Eh 330°	Seismic
1.0D + 1.0W Service Normal	60 mph Wind with No Ice
1.0D + 1.0W Service 60°	60 mph Wind with No Ice
1.0D + 1.0W Service 90°	60 mph Wind with No Ice
1.0D + 1.0W Service 120°	60 mph Wind with No Ice
1.0D + 1.0W Service 180°	60 mph Wind with No Ice
1.0D + 1.0W Service 210°	60 mph Wind with No Ice
1.0D + 1.0W Service 240°	60 mph Wind with No Ice

LOAD CASES

1.0D + 1.0W Service 300°	60 mph Wind with No Ice
1.0D + 1.0W Service 330°	60 mph Wind with No Ice

ASSET: # 24516, FALLING CREEK FL
CUSTOMER T-MOBILE

STANDARD ANSI/TIA-222-H
ENG NO.:

TOWER LOADING

Discrete Appurtenance Properties 1.2D + 1.0W

Elev (ft)	Description	Qty	Wt. (lb)	EPA Length (sf)	Length (ft)	Width (in)	Depth (in)	K _a	Orient Factor	Vert Ecc (ft)	M _u (lb-ft)	Q _z (psf)	F _a (WL) (lb)	P _a (DL) (lb)
300.0	Antel RWA-80016CF ____	9	31	10.9	8.0	11.2	5.9	0.80	0.68	0.0	0.00	47.25	2145	33
300.0	Generic Flat Light Sector Fram	3	400	17.9	0.0	0.0	0.0	0.75	0.67	0.0	0.00	47.25	1084	144
250.0	Ericsson Radio 4460 B25+B66	3	109	2.6	1.6	15.7	12.1	0.80	0.67	0.0	0.00	45.47	159	39
250.0	Ericsson Radio 4480 B71+B85A	3	84	2.9	1.8	15.7	7.5	0.80	0.67	0.0	0.00	45.47	177	30
250.0	Gabriel P-24A36G+-U	2	40	4.2	3.0	36.0	0.0	1.00	1.00	0.0	0.00	45.47	324	9
250.0	Ericsson AIR 6419 B41	3	83	6.3	3.0	20.9	9.0	0.80	0.63	0.0	0.00	45.47	369	30
250.0	Sabre C10857001C Sector Frame	3	462	14.4	0.0	0.0	0.0	0.75	0.75	0.0	0.00	45.47	939	166
250.0	Commscope FFVV-65C-R3-V1	3	125	21.1	8.0	25.2	9.3	0.80	0.63	0.0	0.00	45.47	1234	44
196.0	Torque Arms	1	300	12.0	0.0	0.0	0.0	1.00	1.00	0.0	0.00	43.20	441	36
175.0	Ceragon FibeAir RFU-C	1	9	0.5	0.7	7.9	3.4	1.00	0.50	-4.0	37.10	41.97	9	1
175.0	Ceragon 1500HP/RFU-HP	1	15	1.8	1.6	5.7	11.0	1.00	0.50	-4.0	126.22	41.97	32	1
175.0	Andrew Microwaves HPX6-59-P3A/	1	320	41.3	6.5	77.5	53.3	1.00	1.00	-4.0	5,898.05	41.97	1475	38
Totals		33	4,792	357.7									8,388	5,75

TOWER LOADING

Discrete Appurtenance Properties 1.2D + 1.0Di + 1.0Wi

Elev (ft)	Description	Qty	Ice Wt (lb)	Ice EPA Length (sf)	Length (ft)	Width (in)	Depth (in)	K _a	Orient Factor	Vert Ecc (ft)	M _u (lb-ft)	Q _z (psf)	F _a (WL) (lb)	P _a (DL) (lb)
300.0	Antel RWA-80016CF ____	9	67	11.2	8.0	11.2	5.9	0.80	0.68	0.0	0.00	3.11	145	65
300.0	Generic Flat Light Sector Fram	3	454	20.6	0.0	0.0	0.0	0.75	0.67	0.0	0.00	3.11	82	160
250.0	Ericsson Radio 4460 B25+B66	3	125	2.7	1.6	15.7	12.1	0.80	0.67	0.0	0.00	2.99	11	43
250.0	Ericsson Radio 4480 B71+B85A	3	97	3.0	1.8	15.7	7.5	0.80	0.67	0.0	0.00	2.99	12	34
250.0	Gabriel P-24A36G+-U	2	63	9.2	3.0	36.0	0.0	1.00	1.00	0.0	0.00	2.99	47	14
250.0	Ericsson AIR 6419 B41	3	110	6.6	3.0	20.9	9.0	0.80	0.63	0.0	0.00	2.99	25	38
250.0	Sabre C10857001C Sector Frame	3	519	16.2	0.0	0.0	0.0	0.75	0.75	0.0	0.00	2.99	69	183
250.0	Commscope FFVV-65C-R3-V1	3	197	21.8	8.0	25.2	9.3	0.80	0.63	0.0	0.00	2.99	84	66
196.0	Torque Arms	1	336	13.4	0.0	0.0	0.0	1.00	1.00	0.0	0.00	2.84	32	39
175.0	Ceragon FibeAir RFU-C	1	12	0.6	0.7	7.9	3.4	1.00	0.50	-4.0	2.83	2.76	1	1
175.0	Ceragon 1500HP/RFU-HP	1	23	1.9	1.6	5.7	11.0	1.00	0.50	-4.0	9.02	2.76	2	2
175.0	Andrew Microwaves HPX6-59-P3A/	1	459	42.0	6.5	77.5	53.3	1.00	1.00	-4.0	393.71	2.76	98	52
Totals		33	6,063	390.0									609	7,02

TOWER LOADING

Discrete Appurtenance Properties 1.0D + 1.0W Service

Elev (ft)	Description	Qty	Wt. (lb)	EPA Length (sf)	Length (ft)	Width (in)	Depth (in)	K _a	Orient Factor	Vert Ecc (ft)	M _u (lb-ft)	Q _z (psf)	F _a (WL) (lb)	P _a (DL) (lb)
300.0	Antel RWA-80016CF ____	9	31	10.9	8.0	11.2	5.9	0.80	0.68	0.0	0.00	12.42	564	27
300.0	Generic Flat Light Sector Fram	3	400	17.9	0.0	0.0	0.0	0.75	0.67	0.0	0.00	12.42	285	120
250.0	Ericsson Radio 4460 B25+B66	3	109	2.6	1.6	15.7	12.1	0.80	0.67	0.0	0.00	11.96	42	32
250.0	Ericsson Radio 4480 B71+B85A	3	84	2.9	1.8	15.7	7.5	0.80	0.67	0.0	0.00	11.96	47	25
250.0	Gabriel P-24A36G+-U	2	40	4.2	3.0	36.0	0.0	1.00	1.00	0.0	0.00	11.96	85	8
250.0	Ericsson AIR 6419 B41	3	83	6.3	3.0	20.9	9.0	0.80	0.63	0.0	0.00	11.96	97	25
250.0	Sabre C10857001C Sector Frame	3	462	14.4	0.0	0.0	0.0	0.75	0.75	0.0	0.00	11.96	247	138
250.0	Commscope FFVV-65C-R3-V1	3	125	21.1	8.0	25.2	9.3	0.80	0.63	0.0	0.00	11.96	324	37
196.0	Torque Arms	1	300	12.0	0.0	0.0	0.0	1.00	1.00	0.0	0.00	11.36	116	30
175.0	Ceragon FibeAir RFU-C	1	9	0.5	0.7	7.9	3.4	1.00	0.50	-4.0	9.76	11.04	2	9
175.0	Ceragon 1500HP/RFU-HP	1	15	1.8	1.6	5.7	11.0	1.00	0.50	-4.0	33.19	11.04	8	15
175.0	Andrew Microwaves HPX6-59-P3A/	1	320	41.3	6.5	77.5	53.3	1.00	1.00	-4.0	1,551.10	11.04	388	32
Totals		33	4,792	357.7									2,206	4,792

TOWER LOADING

Linear Appurtenance Properties

Elev From (ft)	Elev To (ft)	Description	Qty	Width (in)	Weight (lb/ft)	% In Wind	Spread On Faces	Bundling	Cluster Dia (in)	Out of Zone	Spacing (in)	Orient Factor	K _s Override
0.0	300.0	1 5/8" Coax	9	1.98	0.82	100	2	Individual	0.00	N	1.00	1.00	0.00
0.0	250.0	1 5/8" Coax	2	1.98	0.82	100	2	Individual	0.00	N	1.00	1.00	0.00
0.0	250.0	1.99" (50.7mm) Hybrid	2	1.99	1.90	100	2	Individual	0.00	N	1.00	1.00	0.00
0.0	175.0	7/8" Coax	1	1.09	0.33	100	2	Individual	0.00	N	1.00	1.00	0.01

ASSET: # 24516, FALLING CREEK FL
CUSTOMER T-MOBILE

STANDARD ANSI/TIA-222-H
ENG NO.:

SECTION FORCES

1.2D + 1.0W Normal
117 mph wind with no ice

Gust Response Factor (Gh): 0.85
Wind Importance Factor (Iw): 1.00

Sect #	Elev (ft)	Q _z (psf)	A _f (sf)	A _r (sf)	Ice A _r (sf)	e	C _f	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt. (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
17	290	46.91	4.993	10.011	0.00	0.180	2.66	1.00	1.00	0.0	10.77	28.70	0.00	1602	0	1144	853	1997
16	270	46.21	4.766	10.831	0.00	0.186	2.64	1.00	1.00	0.0	11.03	29.15	0.00	1715	0	1145	840	1985
15	250	45.47	4.766	11.386	0.00	0.193	2.62	1.00	1.00	0.0	11.37	29.79	0.00	1977	0	1151	1011	2162
14	230	44.68	4.928	13.023	0.00	0.212	2.56	1.00	1.00	0.0	12.53	32.03	0.00	2600	0	1216	1174	2390
13	210	43.83	4.714	13.023	0.00	0.210	2.56	1.00	1.00	0.0	12.31	31.57	0.00	2523	0	1176	1152	2328
12	190	42.91	4.714	13.023	0.00	0.210	2.56	1.00	1.00	0.0	12.31	31.57	0.00	2523	0	1152	1128	2279
11	170	41.92	4.714	12.472	0.00	0.203	2.59	1.00	1.00	0.0	11.97	30.94	0.00	2333	0	1103	1102	2205
10	150	40.83	4.714	12.472	0.00	0.203	2.59	1.00	1.00	0.0	11.97	30.94	0.00	2335	0	1074	1074	2147
9	130	39.62	4.928	12.472	0.00	0.206	2.58	1.00	1.00	0.0	12.19	31.41	0.00	2426	0	1058	1042	2099
8	110	38.25	3.792	11.098	0.00	0.177	2.67	1.00	1.00	0.0	10.19	27.25	0.00	1936	0	886	1006	1892
7	90	36.67	3.792	11.098	0.00	0.177	2.67	1.00	1.00	0.0	10.19	27.25	0.00	1936	0	849	964	1814
6	70	34.78	4.160	11.098	0.00	0.181	2.66	1.00	1.00	0.0	10.56	28.10	0.00	2037	0	831	914	1745
5	50	32.40	3.771	11.921	0.00	0.186	2.65	1.00	1.00	0.0	10.66	28.19	0.00	2189	0	776	852	1628
4	30	29.10	3.771	11.921	0.00	0.186	2.65	1.00	1.00	0.0	10.66	28.19	0.00	2189	0	697	765	1462
3	14	25.18	1.885	7.160	0.00	0.178	2.67	1.00	1.00	0.0	6.01	16.06	0.00	1293	0	344	397	741
2	7	25.18	0.628	1.359	0.00	0.235	2.48	1.00	1.00	0.0	1.43	3.56	0.00	246	0	76	66	142
1	3	25.18	0.924	3.369	0.00	0.321	2.24	1.00	1.00	0.0	2.98	6.68	0.00	647	0	143	199	342
														32,507	0			29,358

1.2D + 1.0W 60°
117 mph wind with no ice

Gust Response Factor (Gh): 0.85
Wind Importance Factor (Iw): 1.00

Sect #	Elev (ft)	Q _z (psf)	A _f (sf)	A _r (sf)	Ice A _r (sf)	e	C _f	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt. (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
17	290	46.91	4.993	10.011	0.00	0.180	2.66	0.80	1.00	0.0	9.77	26.03	0.00	1602	0	1038	853	1891
16	270	46.21	4.766	10.831	0.00	0.186	2.64	0.80	1.00	0.0	10.08	26.63	0.00	1715	0	1046	840	1886
15	250	45.47	4.766	11.386	0.00	0.193	2.62	0.80	1.00	0.0	10.42	27.30	0.00	1977	0	1055	1011	2065
14	230	44.68	4.928	13.023	0.00	0.212	2.56	0.80	1.00	0.0	11.55	29.52	0.00	2600	0	1121	1174	2295
13	210	43.83	4.714	13.023	0.00	0.210	2.56	0.80	1.00	0.0	11.37	29.16	0.00	2523	0	1086	1152	2238
12	190	42.91	4.714	13.023	0.00	0.210	2.56	0.80	1.00	0.0	11.37	29.16	0.00	2523	0	1063	1128	2191
11	170	41.92	4.714	12.472	0.00	0.203	2.59	0.80	1.00	0.0	11.02	28.50	0.00	2333	0	1016	1102	2118
10	150	40.83	4.714	12.472	0.00	0.203	2.59	0.80	1.00	0.0	11.02	28.50	0.00	2335	0	989	1074	2063
9	130	39.62	4.928	12.472	0.00	0.206	2.58	0.80	1.00	0.0	11.20	28.87	0.00	2426	0	972	1042	2014
8	110	38.25	3.792	11.098	0.00	0.177	2.67	0.80	1.00	0.0	9.43	25.23	0.00	1936	0	820	1006	1826
7	90	36.67	3.792	11.098	0.00	0.177	2.67	0.80	1.00	0.0	9.43	25.23	0.00	1936	0	786	964	1750
6	70	34.78	4.160	11.098	0.00	0.181	2.66	0.80	1.00	0.0	9.73	25.88	0.00	2037	0	765	914	1680
5	50	32.40	3.771	11.921	0.00	0.186	2.65	0.80	1.00	0.0	9.90	26.20	0.00	2189	0	722	852	1573
4	30	29.10	3.771	11.921	0.00	0.186	2.65	0.80	1.00	0.0	9.90	26.20	0.00	2189	0	648	765	1413
3	14	25.18	1.885	7.160	0.00	0.178	2.67	0.80	1.00	0.0	5.64	15.05	0.00	1293	0	322	397	719
2	7	25.18	0.628	1.359	0.00	0.235	2.48	0.80	1.00	0.0	1.31	3.25	0.00	246	0	69	66	136
1	3	25.18	0.924	3.369	0.00	0.321	2.24	0.80	1.00	0.0	2.79	6.26	0.00	647	0	134	199	333
														32,507	0			28,190

1.2D + 1.0W 90°
117 mph wind with no ice

Gust Response Factor (Gh): 0.85
Wind Importance Factor (Iw): 1.00

Sect #	Elev (ft)	Q _z (psf)	A _f (sf)	A _r (sf)	Ice A _r (sf)	e	C _f	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt. (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
17	290	46.91	4.993	10.011	0.00	0.180	2.66	0.85	1.00	0.0	10.02	26.70	0.00	1602	0	1065	853	1917
16	270	46.21	4.766	10.831	0.00	0.186	2.64	0.85	1.00	0.0	10.32	27.26	0.00	1715	0	1071	840	1911
15	250	45.47	4.766	11.386	0.00	0.193	2.62	0.85	1.00	0.0	10.66	27.92	0.00	1977	0	1079	1011	2090
14	230	44.68	4.928	13.023	0.00	0.212	2.56	0.85	1.00	0.0	11.80	30.15	0.00	2600	0	1145	1174	2319

ASSET: # 24516, FALLING CREEK FL
CUSTOMER T-MOBILE

STANDARD ANSI/TIA-222-H
ENG NO.:

SECTION FORCES

Sect #	Elev (ft)	Q _Z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _f	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt. (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
13	210	43.83	4.714	13.023	0.00	0.210	2.56	0.85	1.00	0.0	11.61	29.76	0.00	2523	0	1109	1152	2260
12	190	42.91	4.714	13.023	0.00	0.210	2.56	0.85	1.00	0.0	11.61	29.76	0.00	2523	0	1086	1128	2213
11	170	41.92	4.714	12.472	0.00	0.203	2.59	0.85	1.00	0.0	11.26	29.11	0.00	2333	0	1037	1102	2139
10	150	40.83	4.714	12.472	0.00	0.203	2.59	0.85	1.00	0.0	11.26	29.11	0.00	2335	0	1010	1074	2084
9	130	39.62	4.928	12.472	0.00	0.206	2.58	0.85	1.00	0.0	11.45	29.50	0.00	2426	0	994	1042	2035
8	110	38.25	3.792	11.098	0.00	0.177	2.67	0.85	1.00	0.0	9.62	25.73	0.00	1936	0	837	1006	1842
7	90	36.67	3.792	11.098	0.00	0.177	2.67	0.85	1.00	0.0	9.62	25.73	0.00	1936	0	802	964	1766
6	70	34.78	4.160	11.098	0.00	0.181	2.66	0.85	1.00	0.0	9.94	26.44	0.00	2037	0	782	914	1696
5	50	32.40	3.771	11.921	0.00	0.186	2.65	0.85	1.00	0.0	10.09	26.70	0.00	2189	0	735	852	1587
4	30	29.10	3.771	11.921	0.00	0.186	2.65	0.85	1.00	0.0	10.09	26.70	0.00	2189	0	660	765	1425
3	14	25.18	1.885	7.160	0.00	0.178	2.67	0.85	1.00	0.0	5.73	15.31	0.00	1293	0	328	397	725
2	7	25.18	0.628	1.359	0.00	0.235	2.48	0.85	1.00	0.0	1.34	3.32	0.00	246	0	71	66	137
1	3	25.18	0.924	3.369	0.00	0.321	2.24	0.85	1.00	0.0	2.84	6.37	0.00	647	0	136	199	335
														32,507	0			28,482

1.2D + 1.0W 120°
117 mph wind with no ice

Gust Response Factor (G_h): 0.85
Wind Importance Factor (I_w): 1.00

Sect #	Elev (ft)	Q _Z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _f	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt. (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
17	290	46.91	4.993	10.011	0.00	0.180	2.66	1.00	1.00	0.0	10.77	28.70	0.00	1602	0	1144	853	1997
16	270	46.21	4.766	10.831	0.00	0.186	2.64	1.00	1.00	0.0	11.03	29.15	0.00	1715	0	1145	840	1985
15	250	45.47	4.766	11.386	0.00	0.193	2.62	1.00	1.00	0.0	11.37	29.79	0.00	1977	0	1151	1011	2162
14	230	44.68	4.928	13.023	0.00	0.212	2.56	1.00	1.00	0.0	12.53	32.03	0.00	2600	0	1216	1174	2390
13	210	43.83	4.714	13.023	0.00	0.210	2.56	1.00	1.00	0.0	12.31	31.57	0.00	2523	0	1176	1152	2328
12	190	42.91	4.714	13.023	0.00	0.210	2.56	1.00	1.00	0.0	12.31	31.57	0.00	2523	0	1152	1128	2279
11	170	41.92	4.714	12.472	0.00	0.203	2.59	1.00	1.00	0.0	11.97	30.94	0.00	2333	0	1103	1102	2205
10	150	40.83	4.714	12.472	0.00	0.203	2.59	1.00	1.00	0.0	11.97	30.94	0.00	2335	0	1074	1074	2147
9	130	39.62	4.928	12.472	0.00	0.206	2.58	1.00	1.00	0.0	12.19	31.41	0.00	2426	0	1058	1042	2099
8	110	38.25	3.792	11.098	0.00	0.177	2.67	1.00	1.00	0.0	10.19	27.25	0.00	1936	0	886	1006	1892
7	90	36.67	3.792	11.098	0.00	0.177	2.67	1.00	1.00	0.0	10.19	27.25	0.00	1936	0	849	964	1814
6	70	34.78	4.160	11.098	0.00	0.181	2.66	1.00	1.00	0.0	10.56	28.10	0.00	2037	0	831	914	1745
5	50	32.40	3.771	11.921	0.00	0.186	2.65	1.00	1.00	0.0	10.66	28.19	0.00	2189	0	776	852	1628
4	30	29.10	3.771	11.921	0.00	0.186	2.65	1.00	1.00	0.0	10.66	28.19	0.00	2189	0	697	765	1462
3	14	25.18	1.885	7.160	0.00	0.178	2.67	1.00	1.00	0.0	6.01	16.06	0.00	1293	0	344	397	741
2	7	25.18	0.628	1.359	0.00	0.235	2.48	1.00	1.00	0.0	1.43	3.56	0.00	246	0	76	66	142
1	3	25.18	0.924	3.369	0.00	0.321	2.24	1.00	1.00	0.0	2.98	6.68	0.00	647	0	143	199	342
														32,507	0			29,358

1.2D + 1.0W 180°
117 mph wind with no ice

Gust Response Factor (G_h): 0.85
Wind Importance Factor (I_w): 1.00

Sect #	Elev (ft)	Q _Z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _f	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt. (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
17	290	46.91	4.993	10.011	0.00	0.180	2.66	0.80	1.00	0.0	9.77	26.03	0.00	1602	0	1038	853	1891
16	270	46.21	4.766	10.831	0.00	0.186	2.64	0.80	1.00	0.0	10.08	26.63	0.00	1715	0	1046	840	1886
15	250	45.47	4.766	11.386	0.00	0.193	2.62	0.80	1.00	0.0	10.42	27.30	0.00	1977	0	1055	1011	2065
14	230	44.68	4.928	13.023	0.00	0.212	2.56	0.80	1.00	0.0	11.55	29.52	0.00	2600	0	1121	1174	2295
13	210	43.83	4.714	13.023	0.00	0.210	2.56	0.80	1.00	0.0	11.37	29.16	0.00	2523	0	1086	1152	2238
12	190	42.91	4.714	13.023	0.00	0.210	2.56	0.80	1.00	0.0	11.37	29.16	0.00	2523	0	1063	1128	2191
11	170	41.92	4.714	12.472	0.00	0.203	2.59	0.80	1.00	0.0	11.02	28.50	0.00	2333	0	1016	1102	2118
10	150	40.83	4.714	12.472	0.00	0.203	2.59	0.80	1.00	0.0	11.02	28.50	0.00	2335	0	989	1074	2063
9	130	39.62	4.928	12.472	0.00	0.206	2.58	0.80	1.00	0.0	11.20	28.87	0.00	2426	0	972	1042	2014
8	110	38.25	3.792	11.098	0.00	0.177	2.67	0.80	1.00	0.0	9.43	25.23	0.00	1936	0	820	1006	1826
7	90	36.67	3.792	11.098	0.00	0.177	2.67	0.80	1.00	0.0	9.43	25.23	0.00	1936	0	786	964	1750
6	70	34.78	4.160	11.098	0.00	0.181	2.66	0.80	1.00	0.0	9.73	25.88	0.00	2037	0	765	914	1680
5	50	32.40	3.771	11.921	0.00	0.186	2.65	0.80	1.00	0.0	9.90	26.20	0.00	2189	0	722	852	1573
4	30	29.10	3.771	11.921	0.00	0.186	2.65	0.80	1.00	0.0	9.90	26.20	0.00	2189	0	648	765	1413
3	14	25.18	1.885	7.160	0.00	0.178	2.67	0.80	1.00	0.0	5.64	15.05	0.00	1293	0	322	397	719

ASSET: # 24516, FALLING CREEK FL
CUSTOMER T-MOBILE

STANDARD ANSI/TIA-222-H
ENG NO.:

SECTION FORCES

Sect #	Elev (ft)	Q _Z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _r	D _r	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt. (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
2	7	25.18	0.628	1.359	0.00	0.235	2.48	0.80	1.00	0.0	1.31	3.25	0.00	246	0	69	66	136
1	3	25.18	0.924	3.369	0.00	0.321	2.24	0.80	1.00	0.0	2.79	6.26	0.00	647	0	134	199	333
															32,507	0		28,190

1.2D + 1.0W 210°
117 mph wind with no ice

Gust Response Factor (Gh): 0.85
Wind Importance Factor (Iw): 1.00

Sect #	Elev (ft)	Q _Z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _r	D _r	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt. (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
17	290	46.91	4.993	10.011	0.00	0.180	2.66	0.85	1.00	0.0	10.02	26.70	0.00	1602	0	1065	853	1917
16	270	46.21	4.766	10.831	0.00	0.186	2.64	0.85	1.00	0.0	10.32	27.26	0.00	1715	0	1071	840	1911
15	250	45.47	4.766	11.386	0.00	0.193	2.62	0.85	1.00	0.0	10.66	27.92	0.00	1977	0	1079	1011	2090
14	230	44.68	4.928	13.023	0.00	0.212	2.56	0.85	1.00	0.0	11.80	30.15	0.00	2600	0	1145	1174	2319
13	210	43.83	4.714	13.023	0.00	0.210	2.56	0.85	1.00	0.0	11.61	29.76	0.00	2523	0	1109	1152	2260
12	190	42.91	4.714	13.023	0.00	0.210	2.56	0.85	1.00	0.0	11.61	29.76	0.00	2523	0	1086	1128	2213
11	170	41.92	4.714	12.472	0.00	0.203	2.59	0.85	1.00	0.0	11.26	29.11	0.00	2333	0	1037	1102	2139
10	150	40.83	4.714	12.472	0.00	0.203	2.59	0.85	1.00	0.0	11.26	29.11	0.00	2335	0	1010	1074	2084
9	130	39.62	4.928	12.472	0.00	0.206	2.58	0.85	1.00	0.0	11.45	29.50	0.00	2426	0	994	1042	2035
8	110	38.25	3.792	11.098	0.00	0.177	2.67	0.85	1.00	0.0	9.62	25.73	0.00	1936	0	837	1006	1842
7	90	36.67	3.792	11.098	0.00	0.177	2.67	0.85	1.00	0.0	9.62	25.73	0.00	1936	0	802	964	1766
6	70	34.78	4.160	11.098	0.00	0.181	2.66	0.85	1.00	0.0	9.94	26.44	0.00	2037	0	782	914	1696
5	50	32.40	3.771	11.921	0.00	0.186	2.65	0.85	1.00	0.0	10.09	26.70	0.00	2189	0	735	852	1587
4	30	29.10	3.771	11.921	0.00	0.186	2.65	0.85	1.00	0.0	10.09	26.70	0.00	2189	0	660	765	1425
3	14	25.18	1.885	7.160	0.00	0.178	2.67	0.85	1.00	0.0	5.73	15.31	0.00	1293	0	328	397	725
2	7	25.18	0.628	1.359	0.00	0.235	2.48	0.85	1.00	0.0	1.34	3.32	0.00	246	0	71	66	137
1	3	25.18	0.924	3.369	0.00	0.321	2.24	0.85	1.00	0.0	2.84	6.37	0.00	647	0	136	199	335
															32,507	0		28,482

1.2D + 1.0W 240°
117 mph wind with no ice

Gust Response Factor (Gh): 0.85
Wind Importance Factor (Iw): 1.00

Sect #	Elev (ft)	Q _Z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _r	D _r	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt. (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
17	290	46.91	4.993	10.011	0.00	0.180	2.66	1.00	1.00	0.0	10.77	28.70	0.00	1602	0	1144	853	1997
16	270	46.21	4.766	10.831	0.00	0.186	2.64	1.00	1.00	0.0	11.03	29.15	0.00	1715	0	1145	840	1985
15	250	45.47	4.766	11.386	0.00	0.193	2.62	1.00	1.00	0.0	11.37	29.79	0.00	1977	0	1151	1011	2162
14	230	44.68	4.928	13.023	0.00	0.212	2.56	1.00	1.00	0.0	12.53	32.03	0.00	2600	0	1216	1174	2390
13	210	43.83	4.714	13.023	0.00	0.210	2.56	1.00	1.00	0.0	12.31	31.57	0.00	2523	0	1176	1152	2328
12	190	42.91	4.714	13.023	0.00	0.210	2.56	1.00	1.00	0.0	12.31	31.57	0.00	2523	0	1152	1128	2279
11	170	41.92	4.714	12.472	0.00	0.203	2.59	1.00	1.00	0.0	11.97	30.94	0.00	2333	0	1103	1102	2205
10	150	40.83	4.714	12.472	0.00	0.203	2.59	1.00	1.00	0.0	11.97	30.94	0.00	2335	0	1074	1074	2147
9	130	39.62	4.928	12.472	0.00	0.206	2.58	1.00	1.00	0.0	12.19	31.41	0.00	2426	0	1058	1042	2099
8	110	38.25	3.792	11.098	0.00	0.177	2.67	1.00	1.00	0.0	10.19	27.25	0.00	1936	0	886	1006	1892
7	90	36.67	3.792	11.098	0.00	0.177	2.67	1.00	1.00	0.0	10.19	27.25	0.00	1936	0	849	964	1814
6	70	34.78	4.160	11.098	0.00	0.181	2.66	1.00	1.00	0.0	10.56	28.10	0.00	2037	0	831	914	1745
5	50	32.40	3.771	11.921	0.00	0.186	2.65	1.00	1.00	0.0	10.66	28.19	0.00	2189	0	776	852	1628
4	30	29.10	3.771	11.921	0.00	0.186	2.65	1.00	1.00	0.0	10.66	28.19	0.00	2189	0	697	765	1462
3	14	25.18	1.885	7.160	0.00	0.178	2.67	1.00	1.00	0.0	6.01	16.06	0.00	1293	0	344	397	741
2	7	25.18	0.628	1.359	0.00	0.235	2.48	1.00	1.00	0.0	1.43	3.56	0.00	246	0	76	66	142
1	3	25.18	0.924	3.369	0.00	0.321	2.24	1.00	1.00	0.0	2.98	6.68	0.00	647	0	143	199	342
															32,507	0		29,358

1.2D + 1.0W 300°
117 mph wind with no ice

Gust Response Factor (Gh): 0.85
Wind Importance Factor (Iw): 1.00

Sect #	Elev (ft)	Q _Z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _r	D _r	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt. (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
17	290	46.91	4.993	10.011	0.00	0.180	2.66	0.80	1.00	0.0	9.77	26.03	0.00	1602	0	1038	853	1891
16	270	46.21	4.766	10.831	0.00	0.186	2.64	0.80	1.00	0.0	10.08	26.63	0.00	1715	0	1046	840	1886

ASSET: # 24516, FALLING CREEK FL
CUSTOMER T-MOBILE

STANDARD ANSI/TIA-222-H
ENG NO.:

SECTION FORCES

Sect #	Elev (ft)	Q _Z (psf)	A _f (sf)	A _r (sf)	Ice A _r (sf)	e	C _f	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt. (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
15	250	45.47	4.766	11.386	0.00	0.193	2.62	0.80	1.00	0.0	10.42	27.30	0.00	1977	0	1055	1011	2065
14	230	44.68	4.928	13.023	0.00	0.212	2.56	0.80	1.00	0.0	11.55	29.52	0.00	2600	0	1121	1174	2295
13	210	43.83	4.714	13.023	0.00	0.210	2.56	0.80	1.00	0.0	11.37	29.16	0.00	2523	0	1086	1152	2238
12	190	42.91	4.714	13.023	0.00	0.210	2.56	0.80	1.00	0.0	11.37	29.16	0.00	2523	0	1063	1128	2191
11	170	41.92	4.714	12.472	0.00	0.203	2.59	0.80	1.00	0.0	11.02	28.50	0.00	2333	0	1016	1102	2118
10	150	40.83	4.714	12.472	0.00	0.203	2.59	0.80	1.00	0.0	11.02	28.50	0.00	2335	0	989	1074	2063
9	130	39.62	4.928	12.472	0.00	0.206	2.58	0.80	1.00	0.0	11.20	28.87	0.00	2426	0	972	1042	2014
8	110	38.25	3.792	11.098	0.00	0.177	2.67	0.80	1.00	0.0	9.43	25.23	0.00	1936	0	820	1006	1826
7	90	36.67	3.792	11.098	0.00	0.177	2.67	0.80	1.00	0.0	9.43	25.23	0.00	1936	0	786	964	1750
6	70	34.78	4.160	11.098	0.00	0.181	2.66	0.80	1.00	0.0	9.73	25.88	0.00	2037	0	765	914	1680
5	50	32.40	3.771	11.921	0.00	0.186	2.65	0.80	1.00	0.0	9.90	26.20	0.00	2189	0	722	852	1573
4	30	29.10	3.771	11.921	0.00	0.186	2.65	0.80	1.00	0.0	9.90	26.20	0.00	2189	0	648	765	1413
3	14	25.18	1.885	7.160	0.00	0.178	2.67	0.80	1.00	0.0	5.64	15.05	0.00	1293	0	322	397	719
2	7	25.18	0.628	1.359	0.00	0.235	2.48	0.80	1.00	0.0	1.31	3.25	0.00	246	0	69	66	136
1	3	25.18	0.924	3.369	0.00	0.321	2.24	0.80	1.00	0.0	2.79	6.26	0.00	647	0	134	199	333
														32,507	0			28,190

1.2D + 1.0W 330°
117 mph wind with no ice

Gust Response Factor (G_h): 0.85
Wind Importance Factor (I_w): 1.00

Sect #	Elev (ft)	Q _Z (psf)	A _f (sf)	A _r (sf)	Ice A _r (sf)	e	C _f	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt. (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
17	290	46.91	4.993	10.011	0.00	0.180	2.66	0.85	1.00	0.0	10.02	26.70	0.00	1602	0	1065	853	1917
16	270	46.21	4.766	10.831	0.00	0.186	2.64	0.85	1.00	0.0	10.32	27.26	0.00	1715	0	1071	840	1911
15	250	45.47	4.766	11.386	0.00	0.193	2.62	0.85	1.00	0.0	10.66	27.92	0.00	1977	0	1079	1011	2090
14	230	44.68	4.928	13.023	0.00	0.212	2.56	0.85	1.00	0.0	11.80	30.15	0.00	2600	0	1145	1174	2319
13	210	43.83	4.714	13.023	0.00	0.210	2.56	0.85	1.00	0.0	11.61	29.76	0.00	2523	0	1109	1152	2260
12	190	42.91	4.714	13.023	0.00	0.210	2.56	0.85	1.00	0.0	11.61	29.76	0.00	2523	0	1086	1128	2213
11	170	41.92	4.714	12.472	0.00	0.203	2.59	0.85	1.00	0.0	11.26	29.11	0.00	2333	0	1037	1102	2139
10	150	40.83	4.714	12.472	0.00	0.203	2.59	0.85	1.00	0.0	11.26	29.11	0.00	2335	0	1010	1074	2084
9	130	39.62	4.928	12.472	0.00	0.206	2.58	0.85	1.00	0.0	11.45	29.50	0.00	2426	0	994	1042	2035
8	110	38.25	3.792	11.098	0.00	0.177	2.67	0.85	1.00	0.0	9.62	25.73	0.00	1936	0	837	1006	1842
7	90	36.67	3.792	11.098	0.00	0.177	2.67	0.85	1.00	0.0	9.62	25.73	0.00	1936	0	802	964	1766
6	70	34.78	4.160	11.098	0.00	0.181	2.66	0.85	1.00	0.0	9.94	26.44	0.00	2037	0	782	914	1696
5	50	32.40	3.771	11.921	0.00	0.186	2.65	0.85	1.00	0.0	10.09	26.70	0.00	2189	0	735	852	1587
4	30	29.10	3.771	11.921	0.00	0.186	2.65	0.85	1.00	0.0	10.09	26.70	0.00	2189	0	660	765	1425
3	14	25.18	1.885	7.160	0.00	0.178	2.67	0.85	1.00	0.0	5.73	15.31	0.00	1293	0	328	397	725
2	7	25.18	0.628	1.359	0.00	0.235	2.48	0.85	1.00	0.0	1.34	3.32	0.00	246	0	71	66	137
1	3	25.18	0.924	3.369	0.00	0.321	2.24	0.85	1.00	0.0	2.84	6.37	0.00	647	0	136	199	335
														32,507	0			28,482

1.2D + 1.0Di + 1.0Wi Normal
30 mph wind with 0.25" radial ice

Gust Response Factor (G_h): 0.85
Wind Importance Factor (I_w): 1.00
Ice Importance Factor: 1.00
Ice Dead Load Factor: 1.00

Sect #	Elev (ft)	Q _Z (psf)	A _f (sf)	A _r (sf)	Ice A _r (sf)	e	C _f	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt. (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
17	290	3.08	4.993	16.182	6.17	0.251	2.43	1.00	1.00	0.3	14.52	35.36	6.17	1973	371	93	92	185
16	270	3.04	4.766	16.958	6.13	0.256	2.42	1.00	1.00	0.3	14.78	35.75	6.13	2086	371	92	90	182
15	250	2.99	4.766	17.466	6.08	0.262	2.40	1.00	1.00	0.3	15.12	36.30	6.08	2387	410	92	107	199
14	230	2.94	4.928	19.052	6.03	0.280	2.35	1.00	1.00	0.3	16.32	38.37	6.03	3053	454	96	121	217
13	210	2.88	4.714	18.998	5.98	0.277	2.36	1.00	1.00	0.3	16.06	37.89	5.98	2970	446	93	119	212
12	190	2.82	4.714	18.938	5.92	0.276	2.36	1.00	1.00	0.3	16.02	37.82	5.92	2965	441	91	116	207
11	170	2.76	4.714	18.322	5.85	0.269	2.38	1.00	1.00	0.3	15.61	37.16	5.85	2768	436	87	114	202
10	150	2.68	4.714	18.249	5.78	0.268	2.38	1.00	1.00	0.3	15.56	37.09	5.78	2767	432	85	111	196
9	130	2.60	4.928	18.167	5.70	0.270	2.38	1.00	1.00	0.3	15.73	37.43	5.70	2853	428	83	107	190
8	110	2.51	3.792	16.699	5.60	0.241	2.47	1.00	1.00	0.3	13.59	33.50	5.60	2325	389	72	107	179
7	90	2.41	3.792	16.588	5.49	0.240	2.47	1.00	1.00	0.3	13.52	33.38	5.49	2317	380	68	103	171
6	70	2.29	4.160	16.452	5.35	0.242	2.46	1.00	1.00	0.3	13.82	34.00	5.35	2411	375	66	97	163
5	50	2.13	3.771	17.097	5.18	0.244	2.46	1.00	1.00	0.3	13.82	33.92	5.18	2550	361	61	89	151

ASSET: # 24516, FALLING CREEK FL
CUSTOMER T-MOBILE

STANDARD ANSI/TIA-222-H
ENG NO.:

SECTION FORCES

Sect #	Elev (ft)	Q _Z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _r	D _r	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt. (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
4	30	1.91	3.771	16.839	4.92	0.241	2.46	1.00	1.00	0.2	13.66	33.65	4.92	2529	340	55	79	134
3	14	1.66	1.885	9.808	2.65	0.228	2.50	1.00	1.00	0.2	7.62	19.07	2.65	1475	182	27	41	68
2	7	1.66	0.628	1.963	0.60	0.304	2.29	1.00	1.00	0.2	1.82	4.16	0.60	280	35	6	6	12
1	3	1.66	0.924	4.268	0.90	0.382	2.10	1.00	1.00	0.2	3.62	7.61	0.90	720	73	11	16	27
															38,430	5,923		2,694

1.2D + 1.0Di + 1.0Wi 60°
30 mph wind with 0.25" radial ice

Gust Response Factor (Gh):
Wind Importance Factor (Iw):

0.85
1.00

Ice Importance Factor:
Ice Dead Load Factor:

1.00
1.00

Sect #	Elev (ft)	Q _Z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _r	D _r	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt. (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
17	290	3.08	4.993	16.182	6.17	0.251	2.43	0.80	1.00	0.3	13.53	32.93	6.17	1973	371	86	92	178
16	270	3.04	4.766	16.958	6.13	0.256	2.42	0.80	1.00	0.3	13.83	33.45	6.13	2086	371	86	90	176
15	250	2.99	4.766	17.466	6.08	0.262	2.40	0.80	1.00	0.3	14.16	34.01	6.08	2387	410	86	107	193
14	230	2.94	4.928	19.052	6.03	0.280	2.35	0.80	1.00	0.3	15.34	36.05	6.03	3053	454	90	121	211
13	210	2.88	4.714	18.998	5.98	0.277	2.36	0.80	1.00	0.3	15.12	35.66	5.98	2970	446	87	119	206
12	190	2.82	4.714	18.938	5.92	0.276	2.36	0.80	1.00	0.3	15.08	35.60	5.92	2965	441	85	116	202
11	170	2.76	4.714	18.322	5.85	0.269	2.38	0.80	1.00	0.3	14.66	34.92	5.85	2768	436	82	114	196
10	150	2.68	4.714	18.249	5.78	0.268	2.38	0.80	1.00	0.3	14.62	34.84	5.78	2767	432	79	111	191
9	130	2.60	4.928	18.167	5.70	0.270	2.38	0.80	1.00	0.3	14.75	35.08	5.70	2853	428	78	107	185
8	110	2.51	3.792	16.699	5.60	0.241	2.47	0.80	1.00	0.3	12.83	31.63	5.60	2325	389	68	107	175
7	90	2.41	3.792	16.588	5.49	0.240	2.47	0.80	1.00	0.3	12.76	31.51	5.49	2317	380	65	103	167
6	70	2.29	4.160	16.452	5.35	0.242	2.46	0.80	1.00	0.3	12.98	31.95	5.35	2411	375	62	97	159
5	50	2.13	3.771	17.097	5.18	0.244	2.46	0.80	1.00	0.3	13.06	32.07	5.18	2550	361	58	89	147
4	30	1.91	3.771	16.839	4.92	0.241	2.46	0.80	1.00	0.2	12.90	31.79	4.92	2529	340	52	79	131
3	14	1.66	1.885	9.808	2.65	0.228	2.50	0.80	1.00	0.2	7.24	18.13	2.65	1475	182	26	41	67
2	7	1.66	0.628	1.963	0.60	0.304	2.29	0.80	1.00	0.2	1.70	3.88	0.60	280	35	5	6	12
1	3	1.66	0.924	4.268	0.90	0.382	2.10	0.80	1.00	0.2	3.44	7.22	0.90	720	73	10	16	26
															38,430	5,923		2,623

1.2D + 1.0Di + 1.0Wi 90°
30 mph wind with 0.25" radial ice

Gust Response Factor (Gh):
Wind Importance Factor (Iw):

0.85
1.00

Ice Importance Factor:
Ice Dead Load Factor:

1.00
1.00

Sect #	Elev (ft)	Q _Z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _r	D _r	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt. (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
17	290	3.08	4.993	16.182	6.17	0.251	2.43	0.85	1.00	0.3	13.78	33.54	6.17	1973	371	88	92	180
16	270	3.04	4.766	16.958	6.13	0.256	2.42	0.85	1.00	0.3	14.07	34.03	6.13	2086	371	88	90	178
15	250	2.99	4.766	17.466	6.08	0.262	2.40	0.85	1.00	0.3	14.40	34.59	6.08	2387	410	88	107	195
14	230	2.94	4.928	19.052	6.03	0.280	2.35	0.85	1.00	0.3	15.59	36.63	6.03	3053	454	91	121	212
13	210	2.88	4.714	18.998	5.98	0.277	2.36	0.85	1.00	0.3	15.35	36.22	5.98	2970	446	89	119	208
12	190	2.82	4.714	18.938	5.92	0.276	2.36	0.85	1.00	0.3	15.32	36.16	5.92	2965	441	87	116	203
11	170	2.76	4.714	18.322	5.85	0.269	2.38	0.85	1.00	0.3	14.90	35.48	5.85	2768	436	83	114	198
10	150	2.68	4.714	18.249	5.78	0.268	2.38	0.85	1.00	0.3	14.85	35.40	5.78	2767	432	81	111	192
9	130	2.60	4.928	18.167	5.70	0.270	2.38	0.85	1.00	0.3	14.99	35.67	5.70	2853	428	79	107	186
8	110	2.51	3.792	16.699	5.60	0.241	2.47	0.85	1.00	0.3	13.02	32.10	5.60	2325	389	69	107	176
7	90	2.41	3.792	16.588	5.49	0.240	2.47	0.85	1.00	0.3	12.95	31.97	5.49	2317	380	66	103	168
6	70	2.29	4.160	16.452	5.35	0.242	2.46	0.85	1.00	0.3	13.19	32.47	5.35	2411	375	63	97	160
5	50	2.13	3.771	17.097	5.18	0.244	2.46	0.85	1.00	0.3	13.25	32.54	5.18	2550	361	59	89	148
4	30	1.91	3.771	16.839	4.92	0.241	2.46	0.85	1.00	0.2	13.09	32.25	4.92	2529	340	52	79	132
3	14	1.66	1.885	9.808	2.65	0.228	2.50	0.85	1.00	0.2	7.33	18.36	2.65	1475	182	26	41	67
2	7	1.66	0.628	1.963	0.60	0.304	2.29	0.85	1.00	0.2	1.73	3.95	0.60	280	35	6	6	12
1	3	1.66	0.924	4.268	0.90	0.382	2.10	0.85	1.00	0.2	3.48	7.32	0.90	720	73	10	16	26
															38,430	5,923		2,641

1.2D + 1.0Di + 1.0Wi 120°
30 mph wind with 0.25" radial ice

Gust Response Factor (Gh):
Wind Importance Factor (Iw):

0.85
1.00

Ice Importance Factor:
Ice Dead Load Factor:

1.00
1.00

ASSET: # 24516, FALLING CREEK FL
CUSTOMER T-MOBILE

STANDARD ANSI/TIA-222-H
ENG NO.:

SECTION FORCES

Sect #	Elev (ft)	Q _z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _f	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt. (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
17	290	3.08	4.993	16.182	6.17	0.251	2.43	1.00	1.00	0.3	14.52	35.36	6.17	1973	371	93	92	185
16	270	3.04	4.766	16.958	6.13	0.256	2.42	1.00	1.00	0.3	14.78	35.75	6.13	2086	371	92	90	182
15	250	2.99	4.766	17.466	6.08	0.262	2.40	1.00	1.00	0.3	15.12	36.30	6.08	2387	410	92	107	199
14	230	2.94	4.928	19.052	6.03	0.280	2.35	1.00	1.00	0.3	16.32	38.37	6.03	3053	454	96	121	217
13	210	2.88	4.714	18.998	5.98	0.277	2.36	1.00	1.00	0.3	16.06	37.89	5.98	2970	446	93	119	212
12	190	2.82	4.714	18.938	5.92	0.276	2.36	1.00	1.00	0.3	16.02	37.82	5.92	2965	441	91	116	207
11	170	2.76	4.714	18.322	5.85	0.269	2.38	1.00	1.00	0.3	15.61	37.16	5.85	2768	436	87	114	202
10	150	2.68	4.714	18.249	5.78	0.268	2.38	1.00	1.00	0.3	15.56	37.09	5.78	2767	432	85	111	196
9	130	2.60	4.928	18.167	5.70	0.270	2.38	1.00	1.00	0.3	15.73	37.43	5.70	2853	428	83	107	190
8	110	2.51	3.792	16.699	5.60	0.241	2.47	1.00	1.00	0.3	13.59	33.50	5.60	2325	389	72	107	179
7	90	2.41	3.792	16.588	5.49	0.240	2.47	1.00	1.00	0.3	13.52	33.38	5.49	2317	380	68	103	171
6	70	2.29	4.160	16.452	5.35	0.242	2.46	1.00	1.00	0.3	13.82	34.00	5.35	2411	375	66	97	163
5	50	2.13	3.771	17.097	5.18	0.244	2.46	1.00	1.00	0.3	13.82	33.92	5.18	2550	361	61	89	151
4	30	1.91	3.771	16.839	4.92	0.241	2.46	1.00	1.00	0.2	13.66	33.65	4.92	2529	340	55	79	134
3	14	1.66	1.885	9.808	2.65	0.228	2.50	1.00	1.00	0.2	7.62	19.07	2.65	1475	182	27	41	68
2	7	1.66	0.628	1.963	0.60	0.304	2.29	1.00	1.00	0.2	1.82	4.16	0.60	280	35	6	6	12
1	3	1.66	0.924	4.268	0.90	0.382	2.10	1.00	1.00	0.2	3.62	7.61	0.90	720	73	11	16	27
														38,430	5,923			2,694

1.2D + 1.0Di + 1.0Wi 180°

30 mph wind with 0.25" radial ice

Gust Response Factor (G_h): 0.85
Wind Importance Factor (I_w): 1.00

Ice Importance Factor: 1.00
Ice Dead Load Factor: 1.00

Sect #	Elev (ft)	Q _z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _f	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt. (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
17	290	3.08	4.993	16.182	6.17	0.251	2.43	0.80	1.00	0.3	13.53	32.93	6.17	1973	371	86	92	178
16	270	3.04	4.766	16.958	6.13	0.256	2.42	0.80	1.00	0.3	13.83	33.45	6.13	2086	371	86	90	176
15	250	2.99	4.766	17.466	6.08	0.262	2.40	0.80	1.00	0.3	14.16	34.01	6.08	2387	410	86	107	193
14	230	2.94	4.928	19.052	6.03	0.280	2.35	0.80	1.00	0.3	15.34	36.05	6.03	3053	454	90	121	211
13	210	2.88	4.714	18.998	5.98	0.277	2.36	0.80	1.00	0.3	15.12	35.66	5.98	2970	446	87	119	206
12	190	2.82	4.714	18.938	5.92	0.276	2.36	0.80	1.00	0.3	15.08	35.60	5.92	2965	441	85	116	202
11	170	2.76	4.714	18.322	5.85	0.269	2.38	0.80	1.00	0.3	14.66	34.92	5.85	2768	436	82	114	196
10	150	2.68	4.714	18.249	5.78	0.268	2.38	0.80	1.00	0.3	14.62	34.84	5.78	2767	432	79	111	191
9	130	2.60	4.928	18.167	5.70	0.270	2.38	0.80	1.00	0.3	14.75	35.08	5.70	2853	428	78	107	185
8	110	2.51	3.792	16.699	5.60	0.241	2.47	0.80	1.00	0.3	12.83	31.63	5.60	2325	389	68	107	175
7	90	2.41	3.792	16.588	5.49	0.240	2.47	0.80	1.00	0.3	12.76	31.51	5.49	2317	380	65	103	167
6	70	2.29	4.160	16.452	5.35	0.242	2.46	0.80	1.00	0.3	12.98	31.95	5.35	2411	375	62	97	159
5	50	2.13	3.771	17.097	5.18	0.244	2.46	0.80	1.00	0.3	13.06	32.07	5.18	2550	361	58	89	147
4	30	1.91	3.771	16.839	4.92	0.241	2.46	0.80	1.00	0.2	12.90	31.79	4.92	2529	340	52	79	131
3	14	1.66	1.885	9.808	2.65	0.228	2.50	0.80	1.00	0.2	7.24	18.13	2.65	1475	182	26	41	67
2	7	1.66	0.628	1.963	0.60	0.304	2.29	0.80	1.00	0.2	1.70	3.88	0.60	280	35	5	6	12
1	3	1.66	0.924	4.268	0.90	0.382	2.10	0.80	1.00	0.2	3.44	7.22	0.90	720	73	10	16	26
														38,430	5,923			2,623

1.2D + 1.0Di + 1.0Wi 210°

30 mph wind with 0.25" radial ice

Gust Response Factor (G_h): 0.85
Wind Importance Factor (I_w): 1.00

Ice Importance Factor: 1.00
Ice Dead Load Factor: 1.00

Sect #	Elev (ft)	Q _z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _f	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt. (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
17	290	3.08	4.993	16.182	6.17	0.251	2.43	0.85	1.00	0.3	13.78	33.54	6.17	1973	371	88	92	180
16	270	3.04	4.766	16.958	6.13	0.256	2.42	0.85	1.00	0.3	14.07	34.03	6.13	2086	371	88	90	178
15	250	2.99	4.766	17.466	6.08	0.262	2.40	0.85	1.00	0.3	14.40	34.59	6.08	2387	410	88	107	195
14	230	2.94	4.928	19.052	6.03	0.280	2.35	0.85	1.00	0.3	15.59	36.63	6.03	3053	454	91	121	212
13	210	2.88	4.714	18.998	5.98	0.277	2.36	0.85	1.00	0.3	15.35	36.22	5.98	2970	446	89	119	208
12	190	2.82	4.714	18.938	5.92	0.276	2.36	0.85	1.00	0.3	15.32	36.16	5.92	2965	441	87	116	203
11	170	2.76	4.714	18.322	5.85	0.269	2.38	0.85	1.00	0.3	14.90	35.48	5.85	2768	436	83	114	198
10	150	2.68	4.714	18.249	5.78	0.268	2.38	0.85	1.00	0.3	14.85	35.40	5.78	2767	432	81	111	192
9	130	2.60	4.928	18.167	5.70	0.270	2.38	0.85	1.00	0.3	14.99	35.67	5.70	2853	428	79	107	186
8	110	2.51	3.792	16.699	5.60	0.241	2.47	0.85	1.00	0.3	13.02	32.10	5.60	2325	389	69	107	176
7	90	2.41	3.792	16.588	5.49	0.240	2.47	0.85	1.00	0.3	12.95	31.97	5.49	2317	380	66	103	168

ASSET: # 24516, FALLING CREEK FL
CUSTOMER T-MOBILE

STANDARD ANSI/TIA-222-H
ENG NO.:

SECTION FORCES

Sect #	Elev (ft)	Q _Z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _f	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt. (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
6	70	2.29	4.160	16.452	5.35	0.242	2.46	0.85	1.00	0.3	13.19	32.47	5.35	2411	375	63	97	160
5	50	2.13	3.771	17.097	5.18	0.244	2.46	0.85	1.00	0.3	13.25	32.54	5.18	2550	361	59	89	148
4	30	1.91	3.771	16.839	4.92	0.241	2.46	0.85	1.00	0.2	13.09	32.25	4.92	2529	340	52	79	132
3	14	1.66	1.885	9.808	2.65	0.228	2.50	0.85	1.00	0.2	7.33	18.36	2.65	1475	182	26	41	67
2	7	1.66	0.628	1.963	0.60	0.304	2.29	0.85	1.00	0.2	1.73	3.95	0.60	280	35	6	6	12
1	3	1.66	0.924	4.268	0.90	0.382	2.10	0.85	1.00	0.2	3.48	7.32	0.90	720	73	10	16	26
														38,430	5,923			2,641

1.2D + 1.0Di + 1.0Wi 240° Gust Response Factor (Gh): 0.85 Ice Importance Factor: 1.00
30 mph wind with 0.25" radial ice Wind Importance Factor (Iw): 1.00 Ice Dead Load Factor: 1.00

Sect #	Elev (ft)	Q _Z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _f	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt. (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
17	290	3.08	4.993	16.182	6.17	0.251	2.43	1.00	1.00	0.3	14.52	35.36	6.17	1973	371	93	92	185
16	270	3.04	4.766	16.958	6.13	0.256	2.42	1.00	1.00	0.3	14.78	35.75	6.13	2086	371	92	90	182
15	250	2.99	4.766	17.466	6.08	0.262	2.40	1.00	1.00	0.3	15.12	36.30	6.08	2387	410	92	107	199
14	230	2.94	4.928	19.052	6.03	0.280	2.35	1.00	1.00	0.3	16.32	38.37	6.03	3053	454	96	121	217
13	210	2.88	4.714	18.998	5.98	0.277	2.36	1.00	1.00	0.3	16.06	37.89	5.98	2970	446	93	119	212
12	190	2.82	4.714	18.938	5.92	0.276	2.36	1.00	1.00	0.3	16.02	37.82	5.92	2965	441	91	116	207
11	170	2.76	4.714	18.322	5.85	0.269	2.38	1.00	1.00	0.3	15.61	37.16	5.85	2768	436	87	114	202
10	150	2.68	4.714	18.249	5.78	0.268	2.38	1.00	1.00	0.3	15.56	37.09	5.78	2767	432	85	111	196
9	130	2.60	4.928	18.167	5.70	0.270	2.38	1.00	1.00	0.3	15.73	37.43	5.70	2853	428	83	107	190
8	110	2.51	3.792	16.699	5.60	0.241	2.47	1.00	1.00	0.3	13.59	33.50	5.60	2325	389	72	107	179
7	90	2.41	3.792	16.588	5.49	0.240	2.47	1.00	1.00	0.3	13.52	33.38	5.49	2317	380	68	103	171
6	70	2.29	4.160	16.452	5.35	0.242	2.46	1.00	1.00	0.3	13.82	34.00	5.35	2411	375	66	97	163
5	50	2.13	3.771	17.097	5.18	0.244	2.46	1.00	1.00	0.3	13.82	33.92	5.18	2550	361	61	89	151
4	30	1.91	3.771	16.839	4.92	0.241	2.46	1.00	1.00	0.2	13.66	33.65	4.92	2529	340	55	79	134
3	14	1.66	1.885	9.808	2.65	0.228	2.50	1.00	1.00	0.2	7.62	19.07	2.65	1475	182	27	41	68
2	7	1.66	0.628	1.963	0.60	0.304	2.29	1.00	1.00	0.2	1.82	4.16	0.60	280	35	6	6	12
1	3	1.66	0.924	4.268	0.90	0.382	2.10	1.00	1.00	0.2	3.62	7.61	0.90	720	73	11	16	27
														38,430	5,923			2,694

1.2D + 1.0Di + 1.0Wi 300° Gust Response Factor (Gh): 0.85 Ice Importance Factor: 1.00
30 mph wind with 0.25" radial ice Wind Importance Factor (Iw): 1.00 Ice Dead Load Factor: 1.00

Sect #	Elev (ft)	Q _Z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _f	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt. (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
17	290	3.08	4.993	16.182	6.17	0.251	2.43	0.80	1.00	0.3	13.53	32.93	6.17	1973	371	86	92	178
16	270	3.04	4.766	16.958	6.13	0.256	2.42	0.80	1.00	0.3	13.83	33.45	6.13	2086	371	86	90	176
15	250	2.99	4.766	17.466	6.08	0.262	2.40	0.80	1.00	0.3	14.16	34.01	6.08	2387	410	86	107	193
14	230	2.94	4.928	19.052	6.03	0.280	2.35	0.80	1.00	0.3	15.34	36.05	6.03	3053	454	90	121	211
13	210	2.88	4.714	18.998	5.98	0.277	2.36	0.80	1.00	0.3	15.12	35.66	5.98	2970	446	87	119	206
12	190	2.82	4.714	18.938	5.92	0.276	2.36	0.80	1.00	0.3	15.08	35.60	5.92	2965	441	85	116	202
11	170	2.76	4.714	18.322	5.85	0.269	2.38	0.80	1.00	0.3	14.66	34.92	5.85	2768	436	82	114	196
10	150	2.68	4.714	18.249	5.78	0.268	2.38	0.80	1.00	0.3	14.62	34.84	5.78	2767	432	79	111	191
9	130	2.60	4.928	18.167	5.70	0.270	2.38	0.80	1.00	0.3	14.75	35.08	5.70	2853	428	78	107	185
8	110	2.51	3.792	16.699	5.60	0.241	2.47	0.80	1.00	0.3	12.83	31.63	5.60	2325	389	68	107	175
7	90	2.41	3.792	16.588	5.49	0.240	2.47	0.80	1.00	0.3	12.76	31.51	5.49	2317	380	65	103	167
6	70	2.29	4.160	16.452	5.35	0.242	2.46	0.80	1.00	0.3	12.98	31.95	5.35	2411	375	62	97	159
5	50	2.13	3.771	17.097	5.18	0.244	2.46	0.80	1.00	0.3	13.06	32.07	5.18	2550	361	58	89	147
4	30	1.91	3.771	16.839	4.92	0.241	2.46	0.80	1.00	0.2	12.90	31.79	4.92	2529	340	52	79	131
3	14	1.66	1.885	9.808	2.65	0.228	2.50	0.80	1.00	0.2	7.24	18.13	2.65	1475	182	26	41	67
2	7	1.66	0.628	1.963	0.60	0.304	2.29	0.80	1.00	0.2	1.70	3.88	0.60	280	35	5	6	12
1	3	1.66	0.924	4.268	0.90	0.382	2.10	0.80	1.00	0.2	3.44	7.22	0.90	720	73	10	16	26
														38,430	5,923			2,623

1.2D + 1.0Di + 1.0Wi 330° Gust Response Factor (Gh): 0.85 Ice Importance Factor: 1.00
30 mph wind with 0.25" radial ice Wind Importance Factor (Iw): 1.00 Ice Dead Load Factor: 1.00

ASSET: # 24516, FALLING CREEK FL
CUSTOMER T-MOBILE

STANDARD ANSI/TIA-222-H
ENG NO.:

SECTION FORCES

Sect #	Elev (ft)	Q _Z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _r	D _r	D _r	T _{lz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt. (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
17	290	3.08	4.993	16.182	6.17	0.251	2.43	0.85	1.00	0.3	13.78	33.54	6.17	1973	371	88	92	180
16	270	3.04	4.766	16.958	6.13	0.256	2.42	0.85	1.00	0.3	14.07	34.03	6.13	2086	371	88	90	178
15	250	2.99	4.766	17.466	6.08	0.262	2.40	0.85	1.00	0.3	14.40	34.59	6.08	2387	410	88	107	195
14	230	2.94	4.928	19.052	6.03	0.280	2.35	0.85	1.00	0.3	15.59	36.63	6.03	3053	454	91	121	212
13	210	2.88	4.714	18.998	5.98	0.277	2.36	0.85	1.00	0.3	15.35	36.22	5.98	2970	446	89	119	208
12	190	2.82	4.714	18.938	5.92	0.276	2.36	0.85	1.00	0.3	15.32	36.16	5.92	2965	441	87	116	203
11	170	2.76	4.714	18.322	5.85	0.269	2.38	0.85	1.00	0.3	14.90	35.48	5.85	2768	436	83	114	198
10	150	2.68	4.714	18.249	5.78	0.268	2.38	0.85	1.00	0.3	14.85	35.40	5.78	2767	432	81	111	192
9	130	2.60	4.928	18.167	5.70	0.270	2.38	0.85	1.00	0.3	14.99	35.67	5.70	2853	428	79	107	186
8	110	2.51	3.792	16.699	5.60	0.241	2.47	0.85	1.00	0.3	13.02	32.10	5.60	2325	389	69	107	176
7	90	2.41	3.792	16.588	5.49	0.240	2.47	0.85	1.00	0.3	12.95	31.97	5.49	2317	380	66	103	168
6	70	2.29	4.160	16.452	5.35	0.242	2.46	0.85	1.00	0.3	13.19	32.47	5.35	2411	375	63	97	160
5	50	2.13	3.771	17.097	5.18	0.244	2.46	0.85	1.00	0.3	13.25	32.54	5.18	2550	361	59	89	148
4	30	1.91	3.771	16.839	4.92	0.241	2.46	0.85	1.00	0.2	13.09	32.25	4.92	2529	340	52	79	132
3	14	1.66	1.885	9.808	2.65	0.228	2.50	0.85	1.00	0.2	7.33	18.36	2.65	1475	182	26	41	67
2	7	1.66	0.628	1.963	0.60	0.304	2.29	0.85	1.00	0.2	1.73	3.95	0.60	280	35	6	6	12
1	3	1.66	0.924	4.268	0.90	0.382	2.10	0.85	1.00	0.2	3.48	7.32	0.90	720	73	10	16	26
														38,430	5,923			2,641

1.0D + 1.0W Service Normal
60 mph Wind with No Ice

Gust Response Factor (G_h): 0.85
Wind Importance Factor (I_w): 1.00

Sect #	Elev (ft)	Q _Z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _r	D _r	D _r	T _{lz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt. (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
17	290	12.34	4.993	10.011	0.00	0.180	2.66	1.00	1.00	0.0	10.77	28.70	0.00	1335	0	301	224	525
16	270	12.15	4.766	10.831	0.00	0.186	2.64	1.00	1.00	0.0	11.03	29.15	0.00	1429	0	301	221	522
15	250	11.96	4.766	11.386	0.00	0.193	2.62	1.00	1.00	0.0	11.37	29.79	0.00	1648	0	303	266	569
14	230	11.75	4.928	13.023	0.00	0.212	2.56	1.00	1.00	0.0	12.53	32.03	0.00	2167	0	320	309	629
13	210	11.53	4.714	13.023	0.00	0.210	2.56	1.00	1.00	0.0	12.31	31.57	0.00	2103	0	309	303	612
12	190	11.29	4.714	13.023	0.00	0.210	2.56	1.00	1.00	0.0	12.31	31.57	0.00	2103	0	303	297	599
11	170	11.02	4.714	12.472	0.00	0.203	2.59	1.00	1.00	0.0	11.97	30.94	0.00	1944	0	290	290	580
10	150	10.74	4.714	12.472	0.00	0.203	2.59	1.00	1.00	0.0	11.97	30.94	0.00	1945	0	282	282	565
9	130	10.42	4.928	12.472	0.00	0.206	2.58	1.00	1.00	0.0	12.19	31.41	0.00	2021	0	278	274	552
8	110	10.06	3.792	11.098	0.00	0.177	2.67	1.00	1.00	0.0	10.19	27.25	0.00	1614	0	233	264	498
7	90	9.64	3.792	11.098	0.00	0.177	2.67	1.00	1.00	0.0	10.19	27.25	0.00	1614	0	223	254	477
6	70	9.15	4.160	11.098	0.00	0.181	2.66	1.00	1.00	0.0	10.56	28.10	0.00	1697	0	218	240	459
5	50	8.52	3.771	11.921	0.00	0.186	2.65	1.00	1.00	0.0	10.66	28.19	0.00	1824	0	204	224	428
4	30	7.65	3.771	11.921	0.00	0.186	2.65	1.00	1.00	0.0	10.66	28.19	0.00	1824	0	183	201	385
3	14	6.62	1.885	7.160	0.00	0.178	2.67	1.00	1.00	0.0	6.01	16.06	0.00	1077	0	90	104	195
2	7	6.62	0.628	1.359	0.00	0.235	2.48	1.00	1.00	0.0	1.43	3.56	0.00	205	0	20	17	37
1	3	6.62	0.924	3.369	0.00	0.321	2.24	1.00	1.00	0.0	2.98	6.68	0.00	539	0	38	52	90
														27,089	0			7,721

1.0D + 1.0W Service 60°
60 mph Wind with No Ice

Gust Response Factor (G_h): 0.85
Wind Importance Factor (I_w): 1.00

Sect #	Elev (ft)	Q _Z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _r	D _r	D _r	T _{lz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt. (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
17	290	12.34	4.993	10.011	0.00	0.180	2.66	0.80	1.00	0.0	9.77	26.03	0.00	1335	0	273	224	497
16	270	12.15	4.766	10.831	0.00	0.186	2.64	0.80	1.00	0.0	10.08	26.63	0.00	1429	0	275	221	496
15	250	11.96	4.766	11.386	0.00	0.193	2.62	0.80	1.00	0.0	10.42	27.30	0.00	1648	0	277	266	543
14	230	11.75	4.928	13.023	0.00	0.212	2.56	0.80	1.00	0.0	11.55	29.52	0.00	2167	0	295	309	603
13	210	11.53	4.714	13.023	0.00	0.210	2.56	0.80	1.00	0.0	11.37	29.16	0.00	2103	0	286	303	588
12	190	11.29	4.714	13.023	0.00	0.210	2.56	0.80	1.00	0.0	11.37	29.16	0.00	2103	0	280	297	576
11	170	11.02	4.714	12.472	0.00	0.203	2.59	0.80	1.00	0.0	11.02	28.50	0.00	1944	0	267	290	557
10	150	10.74	4.714	12.472	0.00	0.203	2.59	0.80	1.00	0.0	11.02	28.50	0.00	1945	0	260	282	542
9	130	10.42	4.928	12.472	0.00	0.206	2.58	0.80	1.00	0.0	11.20	28.87	0.00	2021	0	256	274	530
8	110	10.06	3.792	11.098	0.00	0.177	2.67	0.80	1.00	0.0	9.43	25.23	0.00	1614	0	216	264	480
7	90	9.64	3.792	11.098	0.00	0.177	2.67	0.80	1.00	0.0	9.43	25.23	0.00	1614	0	207	254	460

ASSET: # 24516, FALLING CREEK FL
 CUSTOMER T-MOBILE

STANDARD ANSI/TIA-222-H
 ENG NO.:

SECTION FORCES

Sect #	Elev (ft)	Q _Z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _f	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt. (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
6	70	9.15	4.160	11.098	0.00	0.181	2.66	0.80	1.00	0.0	9.73	25.88	0.00	1697	0	201	240	442
5	50	8.52	3.771	11.921	0.00	0.186	2.65	0.80	1.00	0.0	9.90	26.20	0.00	1824	0	190	224	414
4	30	7.65	3.771	11.921	0.00	0.186	2.65	0.80	1.00	0.0	9.90	26.20	0.00	1824	0	170	201	372
3	14	6.62	1.885	7.160	0.00	0.178	2.67	0.80	1.00	0.0	5.64	15.05	0.00	1077	0	85	104	189
2	7	6.62	0.628	1.359	0.00	0.235	2.48	0.80	1.00	0.0	1.31	3.25	0.00	205	0	18	17	36
1	3	6.62	0.924	3.369	0.00	0.321	2.24	0.80	1.00	0.0	2.79	6.26	0.00	539	0	35	52	87
														27,089	0			7,414

1.0D + 1.0W Service 90°
 60 mph Wind with No Ice

Gust Response Factor (Gh): 0.85
 Wind Importance Factor (Iw): 1.00

Sect #	Elev (ft)	Q _Z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _f	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt. (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
17	290	12.34	4.993	10.011	0.00	0.180	2.66	0.85	1.00	0.0	10.02	26.70	0.00	1335	0	280	224	504
16	270	12.15	4.766	10.831	0.00	0.186	2.64	0.85	1.00	0.0	10.32	27.26	0.00	1429	0	282	221	502
15	250	11.96	4.766	11.386	0.00	0.193	2.62	0.85	1.00	0.0	10.66	27.92	0.00	1648	0	284	266	550
14	230	11.75	4.928	13.023	0.00	0.212	2.56	0.85	1.00	0.0	11.80	30.15	0.00	2167	0	301	309	610
13	210	11.53	4.714	13.023	0.00	0.210	2.56	0.85	1.00	0.0	11.61	29.76	0.00	2103	0	292	303	594
12	190	11.29	4.714	13.023	0.00	0.210	2.56	0.85	1.00	0.0	11.61	29.76	0.00	2103	0	285	297	582
11	170	11.02	4.714	12.472	0.00	0.203	2.59	0.85	1.00	0.0	11.26	29.11	0.00	1944	0	273	290	563
10	150	10.74	4.714	12.472	0.00	0.203	2.59	0.85	1.00	0.0	11.26	29.11	0.00	1945	0	266	282	548
9	130	10.42	4.928	12.472	0.00	0.206	2.58	0.85	1.00	0.0	11.45	29.50	0.00	2021	0	261	274	535
8	110	10.06	3.792	11.098	0.00	0.177	2.67	0.85	1.00	0.0	9.62	25.73	0.00	1614	0	220	264	485
7	90	9.64	3.792	11.098	0.00	0.177	2.67	0.85	1.00	0.0	9.62	25.73	0.00	1614	0	211	254	464
6	70	9.15	4.160	11.098	0.00	0.181	2.66	0.85	1.00	0.0	9.94	26.44	0.00	1697	0	206	240	446
5	50	8.52	3.771	11.921	0.00	0.186	2.65	0.85	1.00	0.0	10.09	26.70	0.00	1824	0	193	224	417
4	30	7.65	3.771	11.921	0.00	0.186	2.65	0.85	1.00	0.0	10.09	26.70	0.00	1824	0	174	201	375
3	14	6.62	1.885	7.160	0.00	0.178	2.67	0.85	1.00	0.0	5.73	15.31	0.00	1077	0	86	104	191
2	7	6.62	0.628	1.359	0.00	0.235	2.48	0.85	1.00	0.0	1.34	3.32	0.00	205	0	19	17	36
1	3	6.62	0.924	3.369	0.00	0.321	2.24	0.85	1.00	0.0	2.84	6.37	0.00	539	0	36	52	88
														27,089	0			7,490

1.0D + 1.0W Service 120°
 60 mph Wind with No Ice

Gust Response Factor (Gh): 0.85
 Wind Importance Factor (Iw): 1.00

Sect #	Elev (ft)	Q _Z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _f	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt. (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
17	290	12.34	4.993	10.011	0.00	0.180	2.66	1.00	1.00	0.0	10.77	28.70	0.00	1335	0	301	224	525
16	270	12.15	4.766	10.831	0.00	0.186	2.64	1.00	1.00	0.0	11.03	29.15	0.00	1429	0	301	221	522
15	250	11.96	4.766	11.386	0.00	0.193	2.62	1.00	1.00	0.0	11.37	29.79	0.00	1648	0	303	266	569
14	230	11.75	4.928	13.023	0.00	0.212	2.56	1.00	1.00	0.0	12.53	32.03	0.00	2167	0	320	309	629
13	210	11.53	4.714	13.023	0.00	0.210	2.56	1.00	1.00	0.0	12.31	31.57	0.00	2103	0	309	303	612
12	190	11.29	4.714	13.023	0.00	0.210	2.56	1.00	1.00	0.0	12.31	31.57	0.00	2103	0	303	297	599
11	170	11.02	4.714	12.472	0.00	0.203	2.59	1.00	1.00	0.0	11.97	30.94	0.00	1944	0	290	290	580
10	150	10.74	4.714	12.472	0.00	0.203	2.59	1.00	1.00	0.0	11.97	30.94	0.00	1945	0	282	282	565
9	130	10.42	4.928	12.472	0.00	0.206	2.58	1.00	1.00	0.0	12.19	31.41	0.00	2021	0	278	274	552
8	110	10.06	3.792	11.098	0.00	0.177	2.67	1.00	1.00	0.0	10.19	27.25	0.00	1614	0	233	264	498
7	90	9.64	3.792	11.098	0.00	0.177	2.67	1.00	1.00	0.0	10.19	27.25	0.00	1614	0	223	254	477
6	70	9.15	4.160	11.098	0.00	0.181	2.66	1.00	1.00	0.0	10.56	28.10	0.00	1697	0	218	240	459
5	50	8.52	3.771	11.921	0.00	0.186	2.65	1.00	1.00	0.0	10.66	28.19	0.00	1824	0	204	224	428
4	30	7.65	3.771	11.921	0.00	0.186	2.65	1.00	1.00	0.0	10.66	28.19	0.00	1824	0	183	201	385
3	14	6.62	1.885	7.160	0.00	0.178	2.67	1.00	1.00	0.0	6.01	16.06	0.00	1077	0	90	104	195
2	7	6.62	0.628	1.359	0.00	0.235	2.48	1.00	1.00	0.0	1.43	3.56	0.00	205	0	20	17	37
1	3	6.62	0.924	3.369	0.00	0.321	2.24	1.00	1.00	0.0	2.98	6.68	0.00	539	0	38	52	90
														27,089	0			7,721

1.0D + 1.0W Service 180°
 60 mph Wind with No Ice

Gust Response Factor (Gh): 0.85
 Wind Importance Factor (Iw): 1.00

ASSET: # 24516, FALLING CREEK FL
CUSTOMER T-MOBILE

STANDARD ANSI/TIA-222-H
ENG NO.:

SECTION FORCES

Sect #	Elev (ft)	Q _Z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _f	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt. (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
17	290	12.34	4.993	10.011	0.00	0.180	2.66	0.80	1.00	0.0	9.77	26.03	0.00	1335	0	273	224	497
16	270	12.15	4.766	10.831	0.00	0.186	2.64	0.80	1.00	0.0	10.08	26.63	0.00	1429	0	275	221	496
15	250	11.96	4.766	11.386	0.00	0.193	2.62	0.80	1.00	0.0	10.42	27.30	0.00	1648	0	277	266	543
14	230	11.75	4.928	13.023	0.00	0.212	2.56	0.80	1.00	0.0	11.55	29.52	0.00	2167	0	295	309	603
13	210	11.53	4.714	13.023	0.00	0.210	2.56	0.80	1.00	0.0	11.37	29.16	0.00	2103	0	286	303	588
12	190	11.29	4.714	13.023	0.00	0.210	2.56	0.80	1.00	0.0	11.37	29.16	0.00	2103	0	280	297	576
11	170	11.02	4.714	12.472	0.00	0.203	2.59	0.80	1.00	0.0	11.02	28.50	0.00	1944	0	267	290	557
10	150	10.74	4.714	12.472	0.00	0.203	2.59	0.80	1.00	0.0	11.02	28.50	0.00	1945	0	260	282	542
9	130	10.42	4.928	12.472	0.00	0.206	2.58	0.80	1.00	0.0	11.20	28.87	0.00	2021	0	256	274	530
8	110	10.06	3.792	11.098	0.00	0.177	2.67	0.80	1.00	0.0	9.43	25.23	0.00	1614	0	216	264	480
7	90	9.64	3.792	11.098	0.00	0.177	2.67	0.80	1.00	0.0	9.43	25.23	0.00	1614	0	207	254	460
6	70	9.15	4.160	11.098	0.00	0.181	2.66	0.80	1.00	0.0	9.73	25.88	0.00	1697	0	201	240	442
5	50	8.52	3.771	11.921	0.00	0.186	2.65	0.80	1.00	0.0	9.90	26.20	0.00	1824	0	190	224	414
4	30	7.65	3.771	11.921	0.00	0.186	2.65	0.80	1.00	0.0	9.90	26.20	0.00	1824	0	170	201	372
3	14	6.62	1.885	7.160	0.00	0.178	2.67	0.80	1.00	0.0	5.64	15.05	0.00	1077	0	85	104	189
2	7	6.62	0.628	1.359	0.00	0.235	2.48	0.80	1.00	0.0	1.31	3.25	0.00	205	0	18	17	36
1	3	6.62	0.924	3.369	0.00	0.321	2.24	0.80	1.00	0.0	2.79	6.26	0.00	539	0	35	52	87
															27,089	0		7,414

1.0D + 1.0W Service 210°
60 mph Wind with No Ice

Gust Response Factor (G_h): 0.85
Wind Importance Factor (I_w): 1.00

Sect #	Elev (ft)	Q _Z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _f	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt. (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
17	290	12.34	4.993	10.011	0.00	0.180	2.66	0.85	1.00	0.0	10.02	26.70	0.00	1335	0	280	224	504
16	270	12.15	4.766	10.831	0.00	0.186	2.64	0.85	1.00	0.0	10.32	27.26	0.00	1429	0	282	221	502
15	250	11.96	4.766	11.386	0.00	0.193	2.62	0.85	1.00	0.0	10.66	27.92	0.00	1648	0	284	266	550
14	230	11.75	4.928	13.023	0.00	0.212	2.56	0.85	1.00	0.0	11.80	30.15	0.00	2167	0	301	309	610
13	210	11.53	4.714	13.023	0.00	0.210	2.56	0.85	1.00	0.0	11.61	29.76	0.00	2103	0	292	303	594
12	190	11.29	4.714	13.023	0.00	0.210	2.56	0.85	1.00	0.0	11.61	29.76	0.00	2103	0	285	297	582
11	170	11.02	4.714	12.472	0.00	0.203	2.59	0.85	1.00	0.0	11.26	29.11	0.00	1944	0	273	290	563
10	150	10.74	4.714	12.472	0.00	0.203	2.59	0.85	1.00	0.0	11.26	29.11	0.00	1945	0	266	282	548
9	130	10.42	4.928	12.472	0.00	0.206	2.58	0.85	1.00	0.0	11.45	29.50	0.00	2021	0	261	274	535
8	110	10.06	3.792	11.098	0.00	0.177	2.67	0.85	1.00	0.0	9.62	25.73	0.00	1614	0	220	264	485
7	90	9.64	3.792	11.098	0.00	0.177	2.67	0.85	1.00	0.0	9.62	25.73	0.00	1614	0	211	254	464
6	70	9.15	4.160	11.098	0.00	0.181	2.66	0.85	1.00	0.0	9.94	26.44	0.00	1697	0	206	240	446
5	50	8.52	3.771	11.921	0.00	0.186	2.65	0.85	1.00	0.0	10.09	26.70	0.00	1824	0	193	224	417
4	30	7.65	3.771	11.921	0.00	0.186	2.65	0.85	1.00	0.0	10.09	26.70	0.00	1824	0	174	201	375
3	14	6.62	1.885	7.160	0.00	0.178	2.67	0.85	1.00	0.0	5.73	15.31	0.00	1077	0	86	104	191
2	7	6.62	0.628	1.359	0.00	0.235	2.48	0.85	1.00	0.0	1.34	3.32	0.00	205	0	19	17	36
1	3	6.62	0.924	3.369	0.00	0.321	2.24	0.85	1.00	0.0	2.84	6.37	0.00	539	0	36	52	88
															27,089	0		7,490

1.0D + 1.0W Service 240°
60 mph Wind with No Ice

Gust Response Factor (G_h): 0.85
Wind Importance Factor (I_w): 1.00

Sect #	Elev (ft)	Q _Z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _f	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt. (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
17	290	12.34	4.993	10.011	0.00	0.180	2.66	1.00	1.00	0.0	10.77	28.70	0.00	1335	0	301	224	525
16	270	12.15	4.766	10.831	0.00	0.186	2.64	1.00	1.00	0.0	11.03	29.15	0.00	1429	0	301	221	522
15	250	11.96	4.766	11.386	0.00	0.193	2.62	1.00	1.00	0.0	11.37	29.79	0.00	1648	0	303	266	569
14	230	11.75	4.928	13.023	0.00	0.212	2.56	1.00	1.00	0.0	12.53	32.03	0.00	2167	0	320	309	629
13	210	11.53	4.714	13.023	0.00	0.210	2.56	1.00	1.00	0.0	12.31	31.57	0.00	2103	0	309	303	612
12	190	11.29	4.714	13.023	0.00	0.210	2.56	1.00	1.00	0.0	12.31	31.57	0.00	2103	0	303	297	599
11	170	11.02	4.714	12.472	0.00	0.203	2.59	1.00	1.00	0.0	11.97	30.94	0.00	1944	0	290	290	580
10	150	10.74	4.714	12.472	0.00	0.203	2.59	1.00	1.00	0.0	11.97	30.94	0.00	1945	0	282	282	565
9	130	10.42	4.928	12.472	0.00	0.206	2.58	1.00	1.00	0.0	12.19	31.41	0.00	2021	0	278	274	552
8	110	10.06	3.792	11.098	0.00	0.177	2.67	1.00	1.00	0.0	10.19	27.25	0.00	1614	0	233	264	498
7	90	9.64	3.792	11.098	0.00	0.177	2.67	1.00	1.00	0.0	10.19	27.25	0.00	1614	0	223	254	477

ASSET: # 24516, FALLING CREEK FL

STANDARD

ANSI/TIA-222-H

CUSTOMER T-MOBILE

ENG NO.:

SECTION FORCES

Sect #	Elev (ft)	Q _z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _f	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt. (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
6	70	9.15	4.160	11.098	0.00	0.181	2.66	1.00	1.00	0.0	10.56	28.10	0.00	1697	0	218	240	459
5	50	8.52	3.771	11.921	0.00	0.186	2.65	1.00	1.00	0.0	10.66	28.19	0.00	1824	0	204	224	428
4	30	7.65	3.771	11.921	0.00	0.186	2.65	1.00	1.00	0.0	10.66	28.19	0.00	1824	0	183	201	385
3	14	6.62	1.885	7.160	0.00	0.178	2.67	1.00	1.00	0.0	6.01	16.06	0.00	1077	0	90	104	195
2	7	6.62	0.628	1.359	0.00	0.235	2.48	1.00	1.00	0.0	1.43	3.56	0.00	205	0	20	17	37
1	3	6.62	0.924	3.369	0.00	0.321	2.24	1.00	1.00	0.0	2.98	6.68	0.00	539	0	38	52	90
														27,089	0			7,721

1.0D + 1.0W Service 300°
60 mph Wind with No IceGust Response Factor (G_h): 0.85
Wind Importance Factor (I_w): 1.00

Sect #	Elev (ft)	Q _z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _f	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt. (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
17	290	12.34	4.993	10.011	0.00	0.180	2.66	0.80	1.00	0.0	9.77	26.03	0.00	1335	0	273	224	497
16	270	12.15	4.766	10.831	0.00	0.186	2.64	0.80	1.00	0.0	10.08	26.63	0.00	1429	0	275	221	496
15	250	11.96	4.766	11.386	0.00	0.193	2.62	0.80	1.00	0.0	10.42	27.30	0.00	1648	0	277	266	543
14	230	11.75	4.928	13.023	0.00	0.212	2.56	0.80	1.00	0.0	11.55	29.52	0.00	2167	0	295	309	603
13	210	11.53	4.714	13.023	0.00	0.210	2.56	0.80	1.00	0.0	11.37	29.16	0.00	2103	0	286	303	588
12	190	11.29	4.714	13.023	0.00	0.210	2.56	0.80	1.00	0.0	11.37	29.16	0.00	2103	0	280	297	576
11	170	11.02	4.714	12.472	0.00	0.203	2.59	0.80	1.00	0.0	11.02	28.50	0.00	1944	0	267	290	557
10	150	10.74	4.714	12.472	0.00	0.203	2.59	0.80	1.00	0.0	11.02	28.50	0.00	1945	0	260	282	542
9	130	10.42	4.928	12.472	0.00	0.206	2.58	0.80	1.00	0.0	11.20	28.87	0.00	2021	0	256	274	530
8	110	10.06	3.792	11.098	0.00	0.177	2.67	0.80	1.00	0.0	9.43	25.23	0.00	1614	0	216	264	480
7	90	9.64	3.792	11.098	0.00	0.177	2.67	0.80	1.00	0.0	9.43	25.23	0.00	1614	0	207	254	460
6	70	9.15	4.160	11.098	0.00	0.181	2.66	0.80	1.00	0.0	9.73	25.88	0.00	1697	0	201	240	442
5	50	8.52	3.771	11.921	0.00	0.186	2.65	0.80	1.00	0.0	9.90	26.20	0.00	1824	0	190	224	414
4	30	7.65	3.771	11.921	0.00	0.186	2.65	0.80	1.00	0.0	9.90	26.20	0.00	1824	0	170	201	372
3	14	6.62	1.885	7.160	0.00	0.178	2.67	0.80	1.00	0.0	5.64	15.05	0.00	1077	0	85	104	189
2	7	6.62	0.628	1.359	0.00	0.235	2.48	0.80	1.00	0.0	1.31	3.25	0.00	205	0	18	17	36
1	3	6.62	0.924	3.369	0.00	0.321	2.24	0.80	1.00	0.0	2.79	6.26	0.00	539	0	35	52	87
														27,089	0			7,414

1.0D + 1.0W Service 330°
60 mph Wind with No IceGust Response Factor (G_h): 0.85
Wind Importance Factor (I_w): 1.00

Sect #	Elev (ft)	Q _z (psf)	A _r (sf)	A _r (sf)	Ice A _r (sf)	e	C _f	D _f	D _r	T _{iz} (in)	A _e (sf)	EPA _a (sf)	EPA _{ai} (sf)	Wt. (lb)	Ice Wt (lb)	F _{st} (lb)	F _a (lb)	Force (lb)
17	290	12.34	4.993	10.011	0.00	0.180	2.66	0.85	1.00	0.0	10.02	26.70	0.00	1335	0	280	224	504
16	270	12.15	4.766	10.831	0.00	0.186	2.64	0.85	1.00	0.0	10.32	27.26	0.00	1429	0	282	221	502
15	250	11.96	4.766	11.386	0.00	0.193	2.62	0.85	1.00	0.0	10.66	27.92	0.00	1648	0	284	266	550
14	230	11.75	4.928	13.023	0.00	0.212	2.56	0.85	1.00	0.0	11.80	30.15	0.00	2167	0	301	309	610
13	210	11.53	4.714	13.023	0.00	0.210	2.56	0.85	1.00	0.0	11.61	29.76	0.00	2103	0	292	303	594
12	190	11.29	4.714	13.023	0.00	0.210	2.56	0.85	1.00	0.0	11.61	29.76	0.00	2103	0	285	297	582
11	170	11.02	4.714	12.472	0.00	0.203	2.59	0.85	1.00	0.0	11.26	29.11	0.00	1944	0	273	290	563
10	150	10.74	4.714	12.472	0.00	0.203	2.59	0.85	1.00	0.0	11.26	29.11	0.00	1945	0	266	282	548
9	130	10.42	4.928	12.472	0.00	0.206	2.58	0.85	1.00	0.0	11.45	29.50	0.00	2021	0	261	274	535
8	110	10.06	3.792	11.098	0.00	0.177	2.67	0.85	1.00	0.0	9.62	25.73	0.00	1614	0	220	264	485
7	90	9.64	3.792	11.098	0.00	0.177	2.67	0.85	1.00	0.0	9.62	25.73	0.00	1614	0	211	254	464
6	70	9.15	4.160	11.098	0.00	0.181	2.66	0.85	1.00	0.0	9.94	26.44	0.00	1697	0	206	240	446
5	50	8.52	3.771	11.921	0.00	0.186	2.65	0.85	1.00	0.0	10.09	26.70	0.00	1824	0	193	224	417
4	30	7.65	3.771	11.921	0.00	0.186	2.65	0.85	1.00	0.0	10.09	26.70	0.00	1824	0	174	201	375
3	14	6.62	1.885	7.160	0.00	0.178	2.67	0.85	1.00	0.0	5.73	15.31	0.00	1077	0	86	104	191
2	7	6.62	0.628	1.359	0.00	0.235	2.48	0.85	1.00	0.0	1.34	3.32	0.00	205	0	19	17	36
1	3	6.62	0.924	3.369	0.00	0.321	2.24	0.85	1.00	0.0	2.84	6.37	0.00	539	0	36	52	88
														27,089	0			7,490

ASSET: # 24516, FALLING CREEK FL
 CUSTOMER T-MOBILE

STANDARD ANSI/TIA-222-H
 ENG NO.:

EQUIVALENT LATERAL FORCE METHOD

Spectral Response Acceleration for Short Period (S_s):	0.09
Spectral Response Acceleration at 1.0 Second Period (S_1):	0.05
Long-Period Transition Period (T_L - Seconds):	8
Importance Factor (I_e):	1.00
Site Coefficient F_a :	1.60
Site Coefficient F_v :	2.40
Response Modification Coefficient (R):	3.00
Design Spectral Response Acceleration at Short Period (S_{ds}):	0.09
Design Spectral Response Acceleration at 1.0 Second Period (S_{d1}):	0.08
Seismic Response Coefficient (C_s):	0.03
Upper Limit C_s :	0.05
Lower Limit C_s :	0.03
Period based on Rayleigh Method (sec):	0.59
Redundancy Factor (p):	1.30
Seismic Force Distribution Exponent (k):	1.04
Total Unfactored Dead Load:	31.88 k
Seismic Base Shear (E):	1.27 k

SEISMIC

Load Case: 1.2D + 1.0Ev + 1.0Eh

Seismic

Section	Height Above Base (ft)	Weight (lb)	W_z (lb-ft)	C_{vx}	Horizontal Force (lb)	Vertical Force (lb)
17	290.00	1,335	499,232	0.075	95	1,626
16	270.00	1,429	496,095	0.075	95	1,741
15	250.00	1,648	527,727	0.079	101	2,007
14	230.00	2,167	636,016	0.096	121	2,640
13	210.00	2,103	561,366	0.084	107	2,562
12	190.00	2,103	505,627	0.076	96	2,562
11	170.00	1,944	416,097	0.063	79	2,368
10	150.00	1,945	365,398	0.055	70	2,370
9	130.00	2,021	326,936	0.049	62	2,463
8	110.00	1,614	219,184	0.033	42	1,966
7	90.00	1,614	177,725	0.027	34	1,966
6	70.00	1,697	143,755	0.022	27	2,068
5	50.00	1,824	108,709	0.016	21	2,222
4	30.00	1,824	63,748	0.010	12	2,222
3	14.00	1,077	16,979	0.003	3	1,313
2	7.00	205	1,565	0.000	0	250
1	3.00	539	1,700	0.000	0	657
Antel RWA-80016CF	300.00	279	108,114	0.016	21	340
Generic Flat Light Sector Frame	300.00	1,200	465,008	0.070	89	1,462
Ericsson Radio 4460 B25+B66	250.00	327	104,735	0.016	20	398
Ericsson Radio 4480 B71+B85A	250.00	252	80,713	0.012	15	307
Gabriel P-24A36G+-U	250.00	80	25,623	0.004	5	97
Ericsson AIR 6419 B41	250.00	250	80,041	0.012	15	304
Sabre C10857001C Sector Frame	250.00	1,386	443,923	0.067	85	1,689
Commscope FFVV-65C-R3-V1	250.00	374	119,725	0.018	23	455
Torque Arms	196.00	300	74,514	0.011	14	366
Ceragon FibeAir RFU-C	175.00	9	1,986	0.000	0	11
Ceragon 1500HP/RFU-HP	175.00	15	3,398	0.000	1	19
Andrew Microwaves HPX6-59-P3A/K	175.00	320	70,606	0.011	13	390
Totals		31,881	6,646,245	1.000	1,267	38,842

ASSET: # 24516, FALLING CREEK FL
 CUSTOMER T-MOBILE

STANDARD ANSI/TIA-222-H
 ENG NO.:

FORCE/STRESS SUMMARY

Section 1 – Base 0.0 (ft) and Height 6.00 (ft)

	Pu			Len	Bracing %			F'y	Φc Pn	Shear	Bear					
	(kip)	Load Case		(ft)	X	Y	Z	KL/R	(ksi)	(kip)	ΦRnv	ΦRn	#	#	Use	
Max Compression																
L SOL - 2 3/4" SOLID	-61.92	1.2D + 1.0W 60°		3.215	100	100	100	56.11	50.0	212.32	0.00	0.00	0	0	29	Member
D SOL - 5/8" SOLID	-0.54	1.2D + 1.0W N		4.282	50	50	50	148.21	50.0	3.16	0.00	0.00	0	0	0	Member

Section 2 – Base 6.0 (ft) and Height 2.00 (ft)

	Pu		Len (ft)	Bracing %				F' _y (ksi)	Φ _c P _n (kip)	Shear	Bear	# Bolt	# Hole	Use %	Controls
	(kip)	Load Case		X	Y	Z	KL/R			ΦR _{nv} (kip)	ΦR _n (kip)				
Max Compression															
L SOL - 2 3/4" SOLID	-59.19	1.2D + 1.0W 60°	2	100	100	100	34.91	50.0	244.50	0.00	0.00	0	0	24	Member
H SAE - 2X2X0.1875	-0.06	1.2D + 1.0W N	4	100	100	100	121.12	36.0	13.87	0.00	0.00	0	0	0	Member

	Pu		F _y (ksi)	F _u (ksi)	Φ _c P _n (kip)	Shear	Bear	Blk Shear	# Bolt	# Hole	Use %	Controls
	(kip)	Load Case				ΦR _{nv} (kip)	ΦR _n (kip)	Φ _t P _n (kip)				
Max Tension Member												
D SOL - 5/8" SOLID	1.81	1.2D + 1.0W N	50.0	65	13.81	0.00	0.00	0.00	0	0	13	Member

	Pu (kip)	Load Case	ΦR _{nt} (kip)	Use %	Num Bolts	Bolt Type
Max Splice Forces						

Section 3 – Base 8.0 (ft) and Height 12.00 (ft)

	Pu								Shear	Bear					
	(kip)	Load Case	Len	Bracing %		F'y	Φc Pn	ΦRnv	ΦRn	#	#	Use			
Max Compression			(ft)	X	Y	Z	KL/R	(ksi)	(kip)	(kip)	(kip)	Bolt	Hole	%	Controls
L SOL - 2 3/4" SOLID	-60.90	1.2D + 1.0W 60°	3.833	100	100	100	66.91	50.0	192.67	0.00	0.00	0	0	31	Member
D SOL - 5/8" SOLID	-1.81	1.2D + 1.0W N	5.54	50	50	50	191.78	50.0	1.88	0.00	0.00	0	0	0	Member

	Pu							Shear	Bear	Blk Shear				
	(kip)	Load Case	Fy	Fu	ΦcPn	ΦRnv	ΦRn	Φt Pn			#	#	Use	
Max Tension Member			(ksi)	(ksi)	(kip)	(kip)	(kip)	(kip)	Bolt	Hole	%	Controls		
H SAE - 2X2X0.1875	1.53	1.2D + 1.0W N	36.0	58	23.17	0.00	0.00	0.00	0	0	6	Member		

	Pu						
	(kip)	Load Case	ΦRnt	Use	Num		
Max Splice Forces			(kip)	%	Bolts	Bolt Type	

Section 4 – Base 20.0 (ft) and Height 20.00 (ft)

	Pu (kip)	Load Case	Len (ft)	Bracing %				F'y (ksi)	Φc Pn (kip)	Shear		Bear		# Bolt	# Hole	Use %	Controls
				X	Y	Z	KL/R			ΦRnv (kip)	ΦRn (kip)						
Max Compression																	
L SOL - 2 3/4" SOLID	-62.52	1.2D + 1.0W 60°	3.8	100	100	100	66.33	50.0	193.76	0.00	0.00		0	0	32	Member	
D SOL - 5/8" SOLID	-1.33	1.2D + 1.0W N	5.517	50	50	50	190.98	50.0	1.90	0.00	0.00		0	0	0	Member	

	Pu (kip)	Load Case	Fy (ksi)	Fu (ksi)	ΦcPn (kip)	ΦRnv (kip)	ΦRn (kip)	Blk Shear		# Bolt	# Hole	Use %	Controls
								Φt Pn (kip)					
Max Tension Member													
H SAE - 2X2X0.1875	1.62	1.2D + 1.0W N	36.0	58	23.17	0.00	0.00	0.00		0	0	6	Member

ASSET: # 24516, FALLING CREEK FL
 CUSTOMER T-MOBILE

STANDARD ANSI/TIA-222-H
 ENG NO.:

FORCE/STRESS SUMMARY

Max Splice Forces	Pu (kip)	Load Case	ΦR_{nt} (kip)	Use %	Num Bolts	Bolt Type
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Section 5 – Base 40.0 (ft) and Height 20.00 (ft)

Max Compression	Pu (kip)	Load Case	Len (ft)	Bracing %				F' _y (ksi)	$\Phi_c P_n$ (kip)	ΦR_{nv} (kip)	ΦR_n (kip)	Shear		Bear		# Bolt	# Hole	Use %	Controls
				X	Y	Z	KL/R					ΦR_{nv}	ΦR_n	$\Phi_t P_n$	ΦR_n				
L SOL - 2 3/4" SOLID	-61.41	1.2D + 1.0W 60°	3.8	100	100	100	66.33	50.0	193.76	0.00	0.00	0	0	0	0	0	0	31	Member
H SAE - 2X2X0.1875	-0.79	1.2D + 1.0W 60°	4	100	100	100	121.12	36.0	13.87	0.00	0.00	0	0	0	0	0	0	5	Member
D SOL - 5/8" SOLID	-0.58	1.2D + 1.0W N	5.517	50	50	50	190.98	50.0	1.90	0.00	0.00	0	0	0	0	0	0	0	Member

Max Tension Member	Pu (kip)	Load Case	F _y (ksi)	F _u (ksi)	$\Phi_c P_n$ (kip)	ΦR_{nv} (kip)	ΦR_n (kip)	$\Phi_t P_n$ (kip)	Shear		Bear		# Bolt	# Hole	Use %	Controls
									ΦR_{nv}	ΦR_n	$\Phi_t P_n$	ΦR_n				
H SAE - 2X2X0.1875	1.54	1.2D + 1.0W N	36.0	58	23.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0	6	Member
D SOL - 5/8" SOLID	2.00	1.2D + 1.0W 90°	50.0	65	13.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0	14	Member

Max Splice Forces	Pu (kip)	Load Case	ΦR_{nt} (kip)	Use %	Num Bolts	Bolt Type
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Section 6 – Base 60.0 (ft) and Height 20.00 (ft)

Max Compression	Pu (kip)	Load Case	Len (ft)	Bracing %				F' _y (ksi)	$\Phi_c P_n$ (kip)	ΦR_{nv} (kip)	ΦR_n (kip)	Shear		Bear		# Bolt	# Hole	Use %	Controls
				X	Y	Z	KL/R					ΦR_{nv}	ΦR_n	$\Phi_t P_n$	ΦR_n				
L SOL - 2 1/2" SOLID	-54.52	1.2D + 1.0W 60°	3.8	100	100	100	72.96	50.0	149.71	0.00	0.00	0	0	0	0	0	0	36	Member
H SAE - 2X2X0.1875	-1.84	1.2D + 1.0W 90°	4	100	100	100	121.12	36.0	13.87	0.00	0.00	0	0	0	0	0	0	13	Member
D SOL - 5/8" SOLID	-1.21	1.2D + 1.0W N	5.517	50	50	50	190.98	50.0	1.90	0.00	0.00	0	0	0	0	0	0	0	Member

Max Tension Member	Pu (kip)	Load Case	F _y (ksi)	F _u (ksi)	$\Phi_c P_n$ (kip)	ΦR_{nv} (kip)	ΦR_n (kip)	$\Phi_t P_n$ (kip)	Shear		Bear		# Bolt	# Hole	Use %	Controls
									ΦR_{nv}	ΦR_n	$\Phi_t P_n$	ΦR_n				
H SAE - 2X2X0.1875	1.87	1.2D + 1.0W 60°	36.0	58	23.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0	8	Member
D SOL - 5/8" SOLID	2.79	1.2D + 1.0W 90°	50.0	65	13.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0	20	Member

Max Splice Forces	Pu (kip)	Load Case	ΦR_{nt} (kip)	Use %	Num Bolts	Bolt Type
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Section 7 – Base 80.0 (ft) and Height 20.00 (ft)

Max Compression	Pu (kip)	Load Case	Len (ft)	Bracing %				F' _y (ksi)	$\Phi_c P_n$ (kip)	ΦR_{nv} (kip)	ΦR_n (kip)	Shear		Bear		# Bolt	# Hole	Use %	Controls
				X	Y	Z	KL/R					ΦR_{nv}	ΦR_n	$\Phi_t P_n$	ΦR_n				
L SOL - 2 1/2" SOLID	-53.98	1.2D + 1.0W 180°	3.8	100	100	100	72.96	50.0	149.71	0.00	0.00	0	0	0	0	0	0	36	Member
D SOL - 5/8" SOLID	-1.56	1.2D + 1.0W N	5.517	50	50	50	190.98	50.0	1.90	0.00	0.00	0	0	0	0	0	0	0	Member

Max Tension Member	Pu (kip)	Load Case	F _y (ksi)	F _u (ksi)	$\Phi_c P_n$ (kip)	ΦR_{nv} (kip)	ΦR_n (kip)	$\Phi_t P_n$ (kip)	Shear		Bear		# Bolt	# Hole	Use %	Controls
									ΦR_{nv}	ΦR_n	$\Phi_t P_n$	ΦR_n				
H SAE - 2X2X0.1875	1.71	1.2D + 1.0W N	36.0	58	23.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0	7	Member

Max Splice Forces	Pu (kip)	Load Case	ΦR_{nt} (kip)	Use %	Num Bolts	Bolt Type
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Section 8 – Base 100.0 (ft) and Height 20.00 (ft)

Max Compression	Pu (kip)	Load Case	Len (ft)	Bracing %				F' _y (ksi)	$\Phi_c P_n$ (kip)	ΦR_{nv} (kip)	ΦR_n (kip)	Shear		Bear		# Bolt	# Hole	Use %	Controls
				X	Y	Z	KL/R					ΦR_{nv}	ΦR_n	$\Phi_t P_n$	ΦR_n				
L SOL - 2 1/2" SOLID	-53.36	1.2D + 1.0W 60°	3.8	100	100	100	72.96	50.0	149.71	0.00	0.00	0	0	0	0	0	0	35	Member
H SAE - 2X2X0.1875	-0.43	1.2D + 1.0W N	4	100	100	100	121.12	36.0	13.87	0.00	0.00	0	0	0	0	0	0	3	Member
D SOL - 5/8" SOLID	-0.64	1.2D + 1.0W N	5.517	50	50	50	190.98	50.0	1.90	0.00	0.00	0	0	0	0	0	0	0	Member

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	Pu (kip)	Load Case	F _y (ksi)	F _u (ksi)	Φ _c P _n (kip)	Shear ΦR _{nv} (kip)	Bear ΦR _n (kip)	Blk Shear Φ _t P _n (kip)	# Bolt	# Hole	Use %	Controls
Max Tension Member												
H SAE - 2X2X0.1875	1.63	1.2D + 1.0W 60°	36.0	58	23.17	0.00	0.00	0.00	0	0	7	Member
D SOL - 5/8" SOLID	1.80	1.2D + 1.0W N	50.0	65	13.81	0.00	0.00	0.00	0	0	13	Member

	Pu (kip)	Load Case	ΦR _{nt} (kip)	Use %	Num Bolts	Bolt Type
Max Splice Forces						

Section 9 – Base 120.0 (ft) and Height 20.00 (ft)

	Pu (kip)	Load Case	Len (ft)	Bracing % X Y Z	KL/R	F' _y (ksi)	Φ _c P _n (kip)	Shear ΦR _{nv} (kip)	Bear ΦR _n (kip)	# Bolt	# Hole	Use %	Controls
Max Compression													
L SOL - 2 3/4" SOLID	-62.63	1.2D + 1.0W N	3.8	100 100 100	66.33	50.0	193.76	0.00	0.00	0	0	32	Member
D SOL - 3/4" SOLID	-1.12	1.2D + 1.0W N	5.517	50 50 50	158.90	50.0	3.95	0.00	0.00	0	0	0	Member

	Pu (kip)	Load Case	F _y (ksi)	F _u (ksi)	Φ _c P _n (kip)	Shear ΦR _{nv} (kip)	Bear ΦR _n (kip)	Blk Shear Φ _t P _n (kip)	# Bolt	# Hole	Use %	Controls
Max Tension Member												
H SAE - 2.5X2.5X0.1875	2.07	1.2D + 1.0W 60°	36.0	58	29.22	0.00	0.00	0.00	0	0	7	Member
D SOL - 3/4" SOLID	0.43	1.2D + 1.0W 90°	50.0	65	19.88	0.00	0.00	0.00	0	0	2	Member

	Pu (kip)	Load Case	ΦR _{nt} (kip)	Use %	Num Bolts	Bolt Type
Max Splice Forces						

Section 10 – Base 140.0 (ft) and Height 20.00 (ft)

	Pu (kip)	Load Case	Len (ft)	Bracing % X Y Z	KL/R	F' _y (ksi)	Φ _c P _n (kip)	Shear ΦR _{nv} (kip)	Bear ΦR _n (kip)	# Bolt	# Hole	Use %	Controls
Max Compression													
L SOL - 2 3/4" SOLID	-62.04	1.2D + 1.0W N	3.8	100 100 100	66.33	50.0	193.76	0.00	0.00	0	0	32	Member
D SOL - 3/4" SOLID	-2.44	1.2D + 1.0W N	5.517	50 50 50	158.90	50.0	3.95	0.00	0.00	0	0	0	Member

	Pu (kip)	Load Case	F _y (ksi)	F _u (ksi)	Φ _c P _n (kip)	Shear ΦR _{nv} (kip)	Bear ΦR _n (kip)	Blk Shear Φ _t P _n (kip)	# Bolt	# Hole	Use %	Controls
Max Tension Member												
H SAE - 2.5X2.5X0.1875	1.63	1.2D + 1.0W N	36.0	58	29.22	0.00	0.00	0.00	0	0	5	Member
D SOL - 3/4" SOLID	0.28	1.2D + 1.0W 60°	50.0	65	19.88	0.00	0.00	0.00	0	0	1	Member

	Pu (kip)	Load Case	ΦR _{nt} (kip)	Use %	Num Bolts	Bolt Type
Max Splice Forces						

Section 11 – Base 160.0 (ft) and Height 20.00 (ft)

	Pu (kip)	Load Case	Len (ft)	Bracing % X Y Z	KL/R	F' _y (ksi)	Φ _c P _n (kip)	Shear ΦR _{nv} (kip)	Bear ΦR _n (kip)	# Bolt	# Hole	Use %	Controls
Max Compression													
L SOL - 2 3/4" SOLID	-52.40	1.2D + 1.0W N	3.8	100 100 100	66.33	50.0	193.76	0.00	0.00	0	0	27	Member
D SOL - 3/4" SOLID	-1.45	1.2D + 1.0W N	5.517	50 50 50	158.90	50.0	3.95	0.00	0.00	0	0	0	Member

	Pu (kip)	Load Case	F _y (ksi)	F _u (ksi)	Φ _c P _n (kip)	Shear ΦR _{nv} (kip)	Bear ΦR _n (kip)	Blk Shear Φ _t P _n (kip)	# Bolt	# Hole	Use %	Controls
Max Tension Member												
H SAE - 2.5X2.5X0.1875	1.53	1.2D + 1.0W N	36.0	58	29.22	0.00	0.00	0.00	0	0	5	Member
D SOL - 3/4" SOLID	0.21	1.2D + 1.0W N	50.0	65	19.88	0.00	0.00	0.00	0	0	1	Member

	Pu (kip)	Load Case	ΦR _{nt} (kip)	Use %	Num Bolts	Bolt Type
Max Splice Forces						

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Section 12 – Base 180.0 (ft) and Height 20.00 (ft)

Max Compression	Pu (kip)	Load Case	Len (ft)	Bracing %				F _y (ksi)	Φ _c P _n (kip)	Shear		Bear		# Bolt	# Hole	Use %	Controls
				X	Y	Z	KL/R			Φ _{R_{nv}} (kip)	Φ _{R_n} (kip)						
L SOL - 2 3/4" SOLID	-64.74	1.2D + 1.0W N	3.8	100	100	100	66.33	50.0	193.76	0.00	0.00			0	0	33	Member
H SAE - 2.5X2.5X0.25	-2.44	1.2D + 1.0W N	4	100	100	100	108.88	36.0	26.87	0.00	0.00			0	0	9	Member
D SOL - 7/8" SOLID	-0.25	1.2D + 1.0W N	5.517	50	50	50	136.23	50.0	7.32	0.00	0.00			0	0	0	Member

	Pu	Load Case	F _y	F _u	Φ _c P _n	Shear	Bear	Blk Shear	#	#	Use	
Max Tension Member	(kip)		(ksi)	(ksi)	(kip)	ΦR _{nv}	ΦR _n	Φ _t P _n	Bolt	Hole	%	Controls
L SOL - 2 3/4" SOLID	1.44	1.2D + 1.0W 60°	50.0	65	267.28	0.00	0.00		0	0	0	Member
H SAE - 2.5X2.5X0.25	4.64	1.2D + 1.0W 60°	36.0	58	38.56	0.00	0.00	0.00	0	0	12	Member
D SOL - 7/8" SOLID	0.69	1.2D + 1.0W 60°	50.0	65	27.06	0.00	0.00	0.00	0	0	2	Member

Max Splice Forces	Pu (kip)	Load Case	Φ _{R_{nt}} (kip)	Use %	Num Bolts	Bolt Type
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Section 13 – Base 200.0 (ft) and Height 20.00 (ft)

Max Compression	Pu (kip)	Load Case	Len (ft)	Bracing %				F _y (ksi)	Φ _c P _n (kip)	Shear		Bear		# Bolt	# Hole	Use %	Controls
				X	Y	Z	KL/R			Φ _{R_{nv}} (kip)	Φ _{R_n} (kip)						
L SOL - 2 3/4" SOLID	-59.27	1.2D + 1.0W N	3.8	100	100	100	66.33	50.0	193.76	0.00	0.00			0	0	30	Member
H SAE - 2.5X2.5X0.25	-0.17	1.2D + 1.0W N	4	100	100	100	108.88	36.0	26.87	0.00	0.00			0	0	0	Member
D SOL - 7/8" SOLID	-2.71	1.2D + 1.0W N	5.517	50	50	50	136.23	50.0	7.32	0.00	0.00			0	0	0	Member

Max Tension Member	Pu (kip)	Load Case	F _y (ksi)	F _u (ksi)	Φ _c P _n (kip)	Shear	Bear	Blk Shear	# Bolt	# Hole	Use %	Controls
						ΦR _{nv} (kip)	ΦR _n (kip)	Φ _t P _n (kip)				
H SAE - 2.5X2.5X0.25	1.67	1.2D + 1.0W N	36.0	58	38.56	0.00	0.00	0.00	0	0	4	Member
D SOL - 7/8" SOLID	0.48	1.2D + 1.0W 60°	50.0	65	27.06	0.00	0.00	0.00	0	0	1	Member

Max Splice Forces	Pu (kip)	Load Case	Φ _{R_{nt}} (kip)	Use %	Num Bolts	Bolt Type
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Section 14 – Base 220.0 (ft) and Height 20.00 (ft)

Max Compression	Pu (kip)	Load Case	Len (ft)	Bracing %				F _y (ksi)	Φ _c P _n (kip)	Shear		Bear		# Bolt	# Hole	Use %	Controls
				X	Y	Z	KL/R			Φ _{R_{nv}} (kip)	Φ _{R_n} (kip)						
L SOL - 2 3/4" SOLID	-45.79	1.2D + 1.0W N	3.8	100	100	100	66.33	50.0	193.76	0.00	0.00			0	0	23	Member
H SAE - 2.5X2.5X0.25	-0.34	1.2D + 1.0W 60°	4	100	100	100	108.88	36.0	26.87	0.00	0.00			0	0	1	Member
D SOL - 7/8" SOLID	-1.55	1.2D + 1.0W N	5.517	50	50	50	136.23	50.0	7.32	0.00	0.00			0	0	0	Member

						Shear	Bear	Blk Shear				
	Pu		F _y	F _u	Φ _c P _n	ΦR _{nv}	ΦR _n	Φ _t P _n	#	#	Use	
Max Tension Member	(kip)	Load Case	(ksi)	(ksi)	(kip)	(kip)	(kip)	(kip)	Bolt	Hole	%	Controls
L SOL - 2 3/4" SOLID	2.46	1.2D + 1.0W 60°	50.0	65	267.28	0.00	0.00		0	0	0	Member
H SAE - 2.5X2.5X0.25	1.58	1.2D + 1.0W 60°	36.0	58	38.56	0.00	0.00	0.00	0	0	4	Member
D SOL - 7/8" SOLID	2.98	1.2D + 1.0W 210°	50.0	65	27.06	0.00	0.00	0.00	0	0	11	Member

Max Splice Forces	Pu (kip)	Load Case	Φ _{R_{nt}} (kip)	Use %	Num Bolts	Bolt Type
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Section 15 – Base 240.0 (ft) and Height 20.00 (ft)

Max Compression	Pu (kip)	Load Case	Len (ft)	Bracing %				F _y (ksi)	Φ _c P _n (kip)	Shear		Bear		# Bolt	# Hole	Use %	Controls
				X	Y	Z	KL/R			Φ _{R_{nv}} (kip)	Φ _{R_n} (kip)						
L SOL - 2 1/4" SOLID	-29.55	1.2D + 1.0W N	3.8	100	100	100	81.07	50.0	110.66	0.00	0.00			0	0	26	Member
H SAE - 2.5X2.5X0.25	-0.58	1.2D + 1.0W N	4	100	100	100	108.88	36.0	26.87	0.00	0.00			0	0	2	Member
D SOL - 7/8" SOLID	-3.52	1.2D + 1.0W N	5.517	50	50	50	136.23	50.0	7.32	0.00	0.00			0	0	0	Member

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	Pu (kip)	Load Case	F _y (ksi)	F _u (ksi)	Φ _c P _n (kip)	Shear ΦR _{nv} (kip)	Bear ΦR _n (kip)	Blk Shear Φ _t P _n (kip)	# Bolt	# Hole	Use %	Controls
Max Tension Member												
H SAE - 2.5X2.5X0.25	1.55	1.2D + 1.0W 180°	36.0	58	38.56	0.00	0.00	0.00	0	0	4	Member
D SOL - 7/8" SOLID	1.93	1.2D + 1.0W 90°	50.0	65	27.06	0.00	0.00	0.00	0	0	7	Member

	Pu (kip)	Load Case	ΦR _{nt} (kip)	Use %	Num Bolts	Bolt Type
Max Splice Forces						

Section 16 – Base 260.0 (ft) and Height 20.00 (ft)

	Pu (kip)	Load Case	Len (ft)	Bracing % X Y Z	KL/R	F' _y (ksi)	Φ _c P _n (kip)	Shear ΦR _{nv} (kip)	Bear ΦR _n (kip)	# Bolt	# Hole	Use %	Controls
Max Compression													
L SOL - 2 1/4" SOLID	-15.44	1.2D + 1.0W 60°	3.8	100 100 100	81.07	50.0	110.66	0.00	0.00	0	0	13	Member >
D SOL - 3/4" SOLID	-0.77	1.2D + 1.0W N	5.517	50 50 50	158.90	50.0	3.95	0.00	0.00	0	0	0	Member >

	Pu (kip)	Load Case	F _y (ksi)	F _u (ksi)	Φ _c P _n (kip)	Shear ΦR _{nv} (kip)	Bear ΦR _n (kip)	Blk Shear Φ _t P _n (kip)	# Bolt	# Hole	Use %	Controls
Max Tension Member												
H SAE - 2.5X2.5X0.1875	0.72	1.2D + 1.0W N	36.0	58	29.22	0.00	0.00	0.00	0	0	2	Member

	Pu (kip)	Load Case	ΦR _{nt} (kip)	Use %	Num Bolts	Bolt Type
Max Splice Forces						

Section 17 – Base 280.0 (ft) and Height 20.00 (ft)

	Pu (kip)	Load Case	Len (ft)	Bracing % X Y Z	KL/R	F' _y (ksi)	Φ _c P _n (kip)	Shear ΦR _{nv} (kip)	Bear ΦR _n (kip)	# Bolt	# Hole	Use %	Controls
Max Compression													
L SOL - 2" SOLID	-16.19	1.2D + 1.0W N	3.8	100 100 100	91.20	50.0	76.96	0.00	0.00	0	0	21	Member >
H SAE - 2.5X2.5X0.1875	-0.70	1.2D + 1.0W 60°	4	100 100 100	108.48	36.0	20.46	0.00	0.00	0	0	3	Member >
D SOL - 3/4" SOLID	-0.03	1.2D + 1.0W N	5.517	50 50 50	158.90	50.0	3.95	0.00	0.00	0	0	0	Member >

	Pu (kip)	Load Case	F _y (ksi)	F _u (ksi)	Φ _c P _n (kip)	Shear ΦR _{nv} (kip)	Bear ΦR _n (kip)	Blk Shear Φ _t P _n (kip)	# Bolt	# Hole	Use %	Controls
Max Tension Member												
L SOL - 2" SOLID	10.12	1.2D + 1.0W 60°	50.0	65	141.37	0.00	0.00		0	0	7	Member
H SAE - 2.5X2.5X0.1875	0.94	1.2D + 1.0W N	36.0	58	29.22	0.00	0.00	0.00	0	0	3	Member
D SOL - 3/4" SOLID	2.02	1.2D + 1.0W 60°	50.0	65	19.88	0.00	0.00	0.00	0	0	10	Member

	Pu (kip)	Load Case	ΦR _{nt} (kip)	Use %	Num Bolts	Bolt Type
Max Splice Forces						

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DETAILED REACTIONS

Load Case	Radius (ft)	Elevation (ft)	Azimuth (deg)	Node	*(-) Uplift and (+) Down		
					*F _x (kip)	*F _y (kip)	*F _z (kip)
1.2D + 1.0W Normal	0.00	0.00		1	0.00	157.16	-1.88
	180.00	0.00	0	A1	0.00	-8.35	7.32
	180.00	0.00	240	A1a	-41.93	-51.35	-26.53
	180.00	0.00	120	A1b	41.93	-51.35	-26.53
1.2D + 1.0W 60°	0.00	0.00		1	-1.41	162.72	-0.81
	180.00	0.00	0	A1	-1.96	-25.19	23.77
	180.00	0.00	240	A1a	-56.49	-67.15	-32.61
	180.00	0.00	120	A1b	19.61	-25.16	-13.59
1.2D + 1.0W 90°	0.00	0.00		1	-1.68	160.83	0.04
	180.00	0.00	0	A1	-2.43	-38.38	36.73
	180.00	0.00	240	A1a	-53.24	-62.82	-29.56
	180.00	0.00	120	A1b	10.56	-13.97	-7.21
1.2D + 1.0W 120°	0.00	0.00		1	-1.64	157.23	0.94
	180.00	0.00	0	A1	-2.01	-51.37	49.58
	180.00	0.00	240	A1a	-43.94	-51.41	-23.05
	180.00	0.00	120	A1b	6.35	-8.34	-3.67
1.2D + 1.0W 180°	0.00	0.00		1	0.00	162.70	1.62
	180.00	0.00	0	A1	0.00	-67.11	65.23
	180.00	0.00	240	A1a	-21.57	-25.18	-10.19
	180.00	0.00	120	A1b	21.57	-25.18	-10.19
1.2D + 1.0W 210°	0.00	0.00		1	0.87	160.79	1.42
	180.00	0.00	0	A1	1.02	-62.76	60.89
	180.00	0.00	240	A1a	-11.51	-13.98	-5.54
	180.00	0.00	120	A1b	33.02	-38.39	-16.26
1.2D + 1.0W 240°	0.00	0.00		1	1.64	157.23	0.94
	180.00	0.00	0	A1	2.01	-51.37	49.58
	180.00	0.00	240	A1a	-6.35	-8.34	-3.67
	180.00	0.00	120	A1b	43.94	-51.41	-23.05
1.2D + 1.0W 300°	0.00	0.00		1	1.41	162.72	-0.81
	180.00	0.00	0	A1	1.96	-25.19	23.77
	180.00	0.00	240	A1a	-19.61	-25.16	-13.59
	180.00	0.00	120	A1b	56.49	-67.15	-32.61
1.2D + 1.0W 330°	0.00	0.00		1	0.81	160.76	-1.46
	180.00	0.00	0	A1	0.96	-13.98	12.73
	180.00	0.00	240	A1a	-30.59	-38.34	-20.47
	180.00	0.00	120	A1b	52.22	-62.77	-31.32
1.2D + 1.0Di + 1.0Wi Normal	0.00	0.00		1	0.00	148.03	-0.16
	180.00	0.00	0	A1	0.00	-28.62	29.69
	180.00	0.00	240	A1a	-28.88	-32.33	-16.91
	180.00	0.00	120	A1b	28.88	-32.33	-16.91
1.2D + 1.0Di + 1.0Wi 60°	0.00	0.00		1	-0.14	147.65	-0.08
	180.00	0.00	0	A1	-0.21	-29.79	30.85
	180.00	0.00	240	A1a	-29.92	-33.43	-17.28
	180.00	0.00	120	A1b	26.61	-29.79	-15.60
1.2D + 1.0Di + 1.0Wi 90°	0.00	0.00		1	-0.16	147.84	0.00
	180.00	0.00	0	A1	-0.26	-31.06	32.15
	180.00	0.00	240	A1a	-29.75	-33.16	-17.06
	180.00	0.00	120	A1b	25.92	-28.93	-15.09
1.2D + 1.0Di + 1.0Wi 120°	0.00	0.00		1	-0.14	148.03	0.08
	180.00	0.00	0	A1	-0.21	-32.32	33.45
	180.00	0.00	240	A1a	-29.07	-32.32	-16.54
	180.00	0.00	120	A1b	25.74	-28.66	-14.86
1.2D + 1.0Di + 1.0Wi 180°	0.00	0.00		1	0.00	147.65	0.16
	180.00	0.00	0	A1	0.00	-33.42	34.55
	180.00	0.00	240	A1a	-26.82	-29.79	-15.24
	180.00	0.00	120	A1b	26.82	-29.79	-15.24
1.2D + 1.0Di + 1.0Wi 210°	0.00	0.00		1	0.08	147.84	0.14
	180.00	0.00	0	A1	0.10	-33.16	34.29
	180.00	0.00	240	A1a	-26.02	-28.94	-14.91
	180.00	0.00	120	A1b	27.97	-31.06	-15.85
1.2D + 1.0Di + 1.0Wi 240°	0.00	0.00		1	0.14	148.03	0.08
	180.00	0.00	0	A1	0.21	-32.32	33.45
	180.00	0.00	240	A1a	-25.74	-28.66	-14.86
	180.00	0.00	120	A1b	29.07	-32.32	-16.54
1.2D + 1.0Di + 1.0Wi 300°	0.00	0.00		1	0.14	147.65	-0.08
	180.00	0.00	0	A1	0.21	-29.79	30.85
	180.00	0.00	240	A1a	-26.61	-29.79	-15.60
	180.00	0.00	120	A1b	29.92	-33.43	-17.28

ASSET: # 24516, FALLING CREEK FL
CUSTOMER T-MOBILE

STANDARD ANSI/TIA-222-H
ENG NO.:

DETAILED REACTIONS

Load Case	Radius (ft)	Elevation (ft)	Azimuth (deg)	Node	*(-) Uplift and (+) Down		
					*Fx (kip)	*Fy (kip)	*Fz (kip)
1.2D + 1.0Di + 1.0Wi 330°	0.00	0.00		1	0.08	147.84	-0.14
	180.00	0.00	0	A1	0.10	-28.97	30.02
	180.00	0.00	240	A1a	-27.72	-31.06	-16.30
	180.00	0.00	120	A1b	29.62	-33.12	-17.22
1.2D + 1.0Ev + 1.0Eh Normal	0.00	0.00		1	0.00	128.00	0.00
	180.00	0.00	0	A1	0.00	-26.32	26.73
	180.00	0.00	240	A1a	-24.18	-27.72	-13.96
	180.00	0.00	120	A1b	24.18	-27.72	-13.96
1.2D + 1.0Ev + 1.0Eh 60°	0.00	0.00		1	0.00	128.00	0.00
	180.00	0.00	0	A1	0.00	-26.79	27.13
	180.00	0.00	240	A1a	-24.52	-28.18	-14.16
	180.00	0.00	120	A1b	23.49	-26.79	-13.56
1.2D + 1.0Ev + 1.0Eh 90°	0.00	0.00		1	0.00	128.00	0.00
	180.00	0.00	0	A1	0.00	-27.25	27.52
	180.00	0.00	240	A1a	-24.43	-28.06	-14.10
	180.00	0.00	120	A1b	23.24	-26.45	-13.42
1.2D + 1.0Ev + 1.0Eh 120°	0.00	0.00		1	0.00	128.00	0.00
	180.00	0.00	0	A1	0.00	-27.72	27.92
	180.00	0.00	240	A1a	-24.18	-27.72	-13.96
	180.00	0.00	120	A1b	23.15	-26.32	-13.37
1.2D + 1.0Ev + 1.0Eh 180°	0.00	0.00		1	0.00	128.00	0.00
	180.00	0.00	0	A1	0.00	-28.18	28.31
	180.00	0.00	240	A1a	-23.49	-26.79	-13.56
	180.00	0.00	120	A1b	23.49	-26.79	-13.56
1.2D + 1.0Ev + 1.0Eh 210°	0.00	0.00		1	0.00	128.00	0.00
	180.00	0.00	0	A1	0.00	-28.06	28.21
	180.00	0.00	240	A1a	-23.24	-26.45	-13.42
	180.00	0.00	120	A1b	23.83	-27.25	-13.76
1.2D + 1.0Ev + 1.0Eh 240°	0.00	0.00		1	0.00	128.00	0.00
	180.00	0.00	0	A1	0.00	-27.72	27.92
	180.00	0.00	240	A1a	-23.15	-26.32	-13.37
	180.00	0.00	120	A1b	24.18	-27.72	-13.96
1.2D + 1.0Ev + 1.0Eh 300°	0.00	0.00		1	0.00	128.00	0.00
	180.00	0.00	0	A1	0.00	-26.79	27.13
	180.00	0.00	240	A1a	-23.49	-26.79	-13.56
	180.00	0.00	120	A1b	24.52	-28.18	-14.16
1.2D + 1.0Ev + 1.0Eh 330°	0.00	0.00		1	0.00	128.00	0.00
	180.00	0.00	0	A1	0.00	-26.45	26.84
	180.00	0.00	240	A1a	-23.83	-27.25	-13.76
	180.00	0.00	120	A1b	24.43	-28.06	-14.10
1.0D + 1.0W Service Normal	0.00	0.00		1	0.00	123.38	-0.49
	180.00	0.00	0	A1	0.00	-20.49	20.82
	180.00	0.00	240	A1a	-27.39	-31.74	-16.41
	180.00	0.00	120	A1b	27.39	-31.74	-16.41
1.0D + 1.0W Service 60°	0.00	0.00		1	-0.40	123.38	-0.23
	180.00	0.00	0	A1	-0.51	-24.43	24.56
	180.00	0.00	240	A1a	-30.63	-35.35	-17.68
	180.00	0.00	120	A1b	21.02	-24.42	-12.72
1.0D + 1.0W Service 90°	0.00	0.00		1	-0.48	123.37	0.01
	180.00	0.00	0	A1	-0.63	-28.04	28.19
	180.00	0.00	240	A1a	-29.98	-34.38	-17.01
	180.00	0.00	120	A1b	18.84	-21.65	-11.17
1.0D + 1.0W Service 120°	0.00	0.00		1	-0.43	123.38	0.25
	180.00	0.00	0	A1	-0.51	-31.72	31.91
	180.00	0.00	240	A1a	-27.89	-31.73	-15.51
	180.00	0.00	120	A1b	18.06	-20.52	-10.43
1.0D + 1.0W Service 180°	0.00	0.00		1	0.00	123.39	0.46
	180.00	0.00	0	A1	0.00	-35.38	35.39
	180.00	0.00	240	A1a	-21.52	-24.41	-11.83
	180.00	0.00	120	A1b	21.52	-24.41	-11.83
1.0D + 1.0W Service 210°	0.00	0.00		1	0.25	123.37	0.41
	180.00	0.00	0	A1	0.25	-34.37	34.47
	180.00	0.00	240	A1a	-19.10	-21.66	-10.73
	180.00	0.00	120	A1b	24.73	-28.04	-13.55
1.0D + 1.0W Service 240°	0.00	0.00		1	0.43	123.38	0.25
	180.00	0.00	0	A1	0.51	-31.72	31.91
	180.00	0.00	240	A1a	-18.06	-20.52	-10.43
	180.00	0.00	120	A1b	27.89	-31.73	-15.51

ASSET: # 24516, FALLING CREEK FL
CUSTOMER T-MOBILE

STANDARD ANSI/TIA-222-H
ENG NO.:

DETAILED REACTIONS

Load Case	Radius (ft)	Elevation (ft)	Azimuth (deg)	Node	*(-) Uplift and (+) Down		
					*Fx (kip)	*Fy (kip)	*Fz (kip)
1.0D + 1.0W Service 300°	0.00	0.00		1	0.40	123.38	-0.23
	180.00	0.00	0	A1	0.51	-24.43	24.56
	180.00	0.00	240	A1a	-21.02	-24.42	-12.72
	180.00	0.00	120	A1b	30.63	-35.35	-17.68
1.0D + 1.0W Service 330°	0.00	0.00		1	0.23	123.37	-0.41
	180.00	0.00	0	A1	0.25	-21.66	21.90
	180.00	0.00	240	A1a	-24.10	-28.03	-14.64
	180.00	0.00	120	A1b	29.72	-34.38	-17.45

GUY ANCHOR DESIGN LOADS

Radius (ft)	Drop (ft)	Azimuth (deg)	Uplift (kip)	Shear (kip)
180.00	0.00	0	67.11	65.23
180.00	0.00	120	67.15	65.23
180.00	0.00	240	67.15	65.23

ASSET: # 24516, FALLING CREEK FL
 CUSTOMER T-MOBILE

STANDARD ANSI/TIA-222-H
 ENG NO.:

DETAILED CABLE FORCES

Load Case	Elev (ft)	Cable	Anchor Node	Tower Node	Allow Tension (kip)	Applied Tension (kip)	Use%
1.2D + 1.0W Normal	68.10	3/4 EHS	A1	25	34.98	2.31	7
		3/4 EHS	A1b	25a	34.98	8.19	23
		3/4 EHS	A1a	25b	34.98	8.19	23
	139.50	7/8 EHS	A1	49	47.82	0.87	2
		7/8 EHS	A1b	49a	47.82	11.18	23
		7/8 EHS	A1a	49b	47.82	11.18	23
	195.70	3/4 EHS	A1	T3	34.98	1.78	5
		3/4 EHS	A1b	T3	34.98	9.29	27
		3/4 EHS	A1a	T3a	34.98	9.51	27
		3/4 EHS	A1b	T3a	34.98	9.51	27
		3/4 EHS	A1	T3b	34.98	1.78	5
		3/4 EHS	A1a	T3b	34.98	9.29	27
	235.70	1 EHS	A1	83	62.7	2.79	4
		1 EHS	A1b	83a	62.7	17.04	27
		1 EHS	A1a	83b	62.7	17.04	27
	288.10	1 EHS	A1	102	62.7	3.83	6
		1 EHS	A1b	102a	62.7	19.41	31
		1 EHS	A1a	102b	62.7	19.41	31
1.2D + 1.0W 60°	68.10	3/4 EHS	A1	25	34.98	4.45	13
		3/4 EHS	A1b	25a	34.98	4.48	13
		3/4 EHS	A1a	25b	34.98	10.62	30
	139.50	7/8 EHS	A1	49	47.82	5.73	12
		7/8 EHS	A1b	49a	47.82	5.77	12
		7/8 EHS	A1a	49b	47.82	15.52	32
	195.70	3/4 EHS	A1	T3	34.98	5.13	15
		3/4 EHS	A1b	T3	34.98	5.12	15
		3/4 EHS	A1a	T3a	34.98	12.2	35
		3/4 EHS	A1b	T3a	34.98	5.05	14
		3/4 EHS	A1	T3b	34.98	5.07	14
		3/4 EHS	A1a	T3b	34.98	12.2	35
	235.70	1 EHS	A1	83	62.7	8.1	13
		1 EHS	A1b	83a	62.7	8.07	13
		1 EHS	A1a	83b	62.7	22.06	35
	288.10	1 EHS	A1	102	62.7	8.82	14
		1 EHS	A1b	102a	62.7	8.8	14
		1 EHS	A1a	102b	62.7	24.6	39
1.2D + 1.0W 90°	68.10	3/4 EHS	A1	25	34.98	6.23	18
		3/4 EHS	A1b	25a	34.98	2.8	8
		3/4 EHS	A1a	25b	34.98	9.87	28
	139.50	7/8 EHS	A1	49	47.82	8.49	18
		7/8 EHS	A1b	49a	47.82	3	6
		7/8 EHS	A1a	49b	47.82	14.19	30
	195.70	3/4 EHS	A1	T3	34.98	7.36	21
		3/4 EHS	A1b	T3	34.98	2.96	8
		3/4 EHS	A1b	T3a	34.98	2.88	8
		3/4 EHS	A1a	T3a	34.98	11.26	32
		3/4 EHS	A1	T3b	34.98	7.37	21
		3/4 EHS	A1a	T3b	34.98	11.58	33
	235.70	1 EHS	A1	83	62.7	12.6	20
		1 EHS	A1b	83a	62.7	4.46	7
		1 EHS	A1a	83b	62.7	20.76	33
	288.10	1 EHS	A1	102	62.7	14.02	22
		1 EHS	A1b	102a	62.7	5.19	8
		1 EHS	A1a	102b	62.7	23.31	37
1.2D + 1.0W 120°	68.10	3/4 EHS	A1	25	34.98	8.18	23
		3/4 EHS	A1b	25a	34.98	2.33	7
		3/4 EHS	A1a	25b	34.98	8.15	23
	139.50	7/8 EHS	A1	49	47.82	11.17	23
		7/8 EHS	A1b	49a	47.82	0.89	2
		7/8 EHS	A1a	49b	47.82	11.12	23
	195.70	3/4 EHS	A1b	T3	34.98	1.78	5
		3/4 EHS	A1	T3	34.98	9.29	27
		3/4 EHS	A1a	T3a	34.98	9.31	27
		3/4 EHS	A1b	T3a	34.98	1.78	5
		3/4 EHS	A1a	T3b	34.98	9.54	27
		3/4 EHS	A1	T3b	34.98	9.52	27

ASSET: # 24516, FALLING CREEK FL
 CUSTOMER T-MOBILE

STANDARD ANSI/TIA-222-H
 ENG NO.:

DETAILED CABLE FORCES

Load Case	Elev (ft)	Cable	Anchor Node	Tower Node	Allow Tension (kip)	Applied Tension (kip)	Use%
1.2D + 1.0W 180°	235.70	1 EHS	A1	83	62.7	17.06	27
		1 EHS	A1b	83a	62.7	2.78	4
		1 EHS	A1a	83b	62.7	17.1	27
	288.10	1 EHS	A1	102	62.7	19.42	31
		1 EHS	A1b	102a	62.7	3.82	6
		1 EHS	A1a	102b	62.7	19.44	31
	68.10	3/4 EHS	A1	25	34.98	10.65	30
		3/4 EHS	A1b	25a	34.98	4.46	13
		3/4 EHS	A1a	25b	34.98	4.46	13
	139.50	7/8 EHS	A1	49	47.82	15.59	33
		7/8 EHS	A1b	49a	47.82	5.73	12
		7/8 EHS	A1a	49b	47.82	5.73	12
	195.70	3/4 EHS	A1b	T3	34.98	5.07	14
		3/4 EHS	A1	T3	34.98	12.17	35
		3/4 EHS	A1b	T3a	34.98	5.13	15
		3/4 EHS	A1a	T3a	34.98	5.13	15
		3/4 EHS	A1	T3b	34.98	12.17	35
		3/4 EHS	A1a	T3b	34.98	5.07	14
1.2D + 1.0W 210°	235.70	1 EHS	A1	83	62.7	22.01	35
		1 EHS	A1b	83a	62.7	8.1	13
		1 EHS	A1a	83b	62.7	8.1	13
	288.10	1 EHS	A1	102	62.7	24.58	39
		1 EHS	A1b	102a	62.7	8.81	14
		1 EHS	A1a	102b	62.7	8.81	14
	68.10	3/4 EHS	A1	25	34.98	9.9	28
		3/4 EHS	A1b	25a	34.98	6.22	18
		3/4 EHS	A1a	25b	34.98	2.79	8
	139.50	7/8 EHS	A1	49	47.82	14.27	30
		7/8 EHS	A1b	49a	47.82	8.47	18
		7/8 EHS	A1a	49b	47.82	2.99	6
	195.70	3/4 EHS	A1b	T3	34.98	7.38	21
		3/4 EHS	A1	T3	34.98	11.54	33
		3/4 EHS	A1a	T3a	34.98	2.97	8
		3/4 EHS	A1b	T3a	34.98	7.37	21
		3/4 EHS	A1	T3b	34.98	11.23	32
		3/4 EHS	A1a	T3b	34.98	2.88	8
1.2D + 1.0W 240°	235.70	1 EHS	A1	83	62.7	20.71	33
		1 EHS	A1b	83a	62.7	12.61	20
		1 EHS	A1a	83b	62.7	4.47	7
	288.10	1 EHS	A1	102	62.7	23.28	37
		1 EHS	A1b	102a	62.7	14.03	22
		1 EHS	A1a	102b	62.7	5.2	8
	68.10	3/4 EHS	A1	25	34.98	8.18	23
		3/4 EHS	A1b	25a	34.98	8.15	23
		3/4 EHS	A1a	25b	34.98	2.33	7
	139.50	7/8 EHS	A1	49	47.82	11.17	23
		7/8 EHS	A1b	49a	47.82	11.12	23
		7/8 EHS	A1a	49b	47.82	0.89	2
	195.70	3/4 EHS	A1	T3	34.98	9.52	27
		3/4 EHS	A1b	T3	34.98	9.54	27
		3/4 EHS	A1a	T3a	34.98	1.78	5
		3/4 EHS	A1b	T3a	34.98	9.31	27
		3/4 EHS	A1a	T3b	34.98	1.78	5
		3/4 EHS	A1	T3b	34.98	9.29	27
1.2D + 1.0W 300°	235.70	1 EHS	A1	83	62.7	17.06	27
		1 EHS	A1b	83a	62.7	17.1	27
		1 EHS	A1a	83b	62.7	2.78	4
	288.10	1 EHS	A1	102	62.7	19.42	31
		1 EHS	A1b	102a	62.7	19.44	31
		1 EHS	A1a	102b	62.7	3.82	6
	68.10	3/4 EHS	A1	25	34.98	4.45	13
		3/4 EHS	A1b	25a	34.98	10.62	30
		3/4 EHS	A1a	25b	34.98	4.48	13
	139.50	7/8 EHS	A1	49	47.82	5.73	12
		7/8 EHS	A1b	49a	47.82	15.52	32
		7/8 EHS	A1a	49b	47.82	5.77	12
	195.70	3/4 EHS	A1b	T3	34.98	12.2	35
		3/4 EHS	A1	T3	34.98	5.07	14

ASSET: # 24516, FALLING CREEK FL
 CUSTOMER T-MOBILE

STANDARD ANSI/TIA-222-H
 ENG NO.:

DETAILED CABLE FORCES

Load Case	Elev (ft)	Cable	Anchor Node	Tower Node	Allow Tension (kip)	Applied Tension (kip)	Use%
1.2D + 1.0W 330°	235.70	3/4 EHS	A1b	T3a	34.98	12.2	35
		3/4 EHS	A1a	T3a	34.98	5.05	14
		3/4 EHS	A1	T3b	34.98	5.13	15
		3/4 EHS	A1a	T3b	34.98	5.12	15
	288.10	1 EHS	A1	83	62.7	8.1	13
		1 EHS	A1b	83a	62.7	22.06	35
		1 EHS	A1a	83b	62.7	8.07	13
		1 EHS	A1	102	62.7	8.82	14
	68.10	1 EHS	A1b	102a	62.7	24.6	39
		1 EHS	A1a	102b	62.7	8.8	14
		3/4 EHS	A1	25	34.98	2.77	8
		3/4 EHS	A1b	25a	34.98	9.89	28
	139.50	3/4 EHS	A1a	25b	34.98	6.25	18
		7/8 EHS	A1	49	47.82	2.97	6
		7/8 EHS	A1b	49a	47.82	14.23	30
		7/8 EHS	A1a	49b	47.82	8.52	18
	195.70	3/4 EHS	A1b	T3	34.98	11.24	32
		3/4 EHS	A1	T3	34.98	2.89	8
		3/4 EHS	A1a	T3a	34.98	7.35	21
		3/4 EHS	A1b	T3a	34.98	11.56	33
1.2D + 1.0Di + 1.0Wi Normal	235.70	3/4 EHS	A1a	T3b	34.98	7.35	21
		3/4 EHS	A1	T3b	34.98	2.98	9
		1 EHS	A1	83	62.7	4.48	7
		1 EHS	A1b	83a	62.7	20.73	33
	288.10	1 EHS	A1a	83b	62.7	12.57	20
		1 EHS	A1	102	62.7	5.21	8
		1 EHS	A1b	102a	62.7	23.29	37
		1 EHS	A1a	102b	62.7	14	22
	68.10	3/4 EHS	A1	25	34.98	6.69	19
		3/4 EHS	A1b	25a	34.98	7.32	21
		3/4 EHS	A1a	25b	34.98	7.32	21
	139.50	7/8 EHS	A1	49	47.82	8	17
		7/8 EHS	A1b	49a	47.82	8.86	19
		7/8 EHS	A1a	49b	47.82	8.86	19
	195.70	3/4 EHS	A1	T3	34.98	5.48	16
		3/4 EHS	A1b	T3	34.98	6.19	18
		3/4 EHS	A1a	T3a	34.98	6.18	18
		3/4 EHS	A1b	T3a	34.98	6.18	18
1.2D + 1.0Di + 1.0Wi 60°	235.70	3/4 EHS	A1	T3b	34.98	5.48	16
		3/4 EHS	A1a	T3b	34.98	6.19	18
		1 EHS	A1	83	62.7	9.54	15
		1 EHS	A1b	83a	62.7	10.66	17
	288.10	1 EHS	A1a	83b	62.7	10.66	17
		1 EHS	A1	102	62.7	9.27	15
		1 EHS	A1b	102a	62.7	10.65	17
		1 EHS	A1a	102b	62.7	10.65	17
	68.10	3/4 EHS	A1	25	34.98	6.89	20
		3/4 EHS	A1b	25a	34.98	6.89	20
		3/4 EHS	A1a	25b	34.98	7.5	21
	139.50	7/8 EHS	A1	49	47.82	8.26	17
		7/8 EHS	A1b	49a	47.82	8.27	17
		7/8 EHS	A1a	49b	47.82	9.11	19
	195.70	3/4 EHS	A1	T3	34.98	5.7	16
		3/4 EHS	A1b	T3	34.98	5.7	16
		3/4 EHS	A1a	T3a	34.98	6.37	18
		3/4 EHS	A1b	T3a	34.98	5.69	16
1.2D + 1.0Di + 1.0Wi 90°	235.70	3/4 EHS	A1	T3b	34.98	5.69	16
		3/4 EHS	A1a	T3b	34.98	6.37	18
		1 EHS	A1	83	62.7	9.89	16
		1 EHS	A1b	83a	62.7	9.88	16
	288.10	1 EHS	A1a	83b	62.7	11.01	18
		1 EHS	A1	102	62.7	9.72	15
		1 EHS	A1b	102a	62.7	9.72	15
		1 EHS	A1a	102b	62.7	11.06	18
	68.10	3/4 EHS	A1	25	34.98	7.1	20
		3/4 EHS	A1b	25a	34.98	6.75	19
		3/4 EHS	A1a	25b	34.98	7.46	21
	139.50	7/8 EHS	A1	49	47.82	8.56	18

ASSET: # 24516, FALLING CREEK FL

STANDARD

ANSI/TIA-222-H

CUSTOMER T-MOBILE

ENG NO.:

DETAILED CABLE FORCES

Load Case	Elev (ft)	Cable	Anchor Node	Tower Node	Allow Tension (kip)	Applied Tension (kip)	Use%
1.2D + 1.0Di + 1.0Wi 120°	195.70	7/8 EHS	A1b	49a	47.82	8.08	17
		7/8 EHS	A1a	49b	47.82	9.05	19
		3/4 EHS	A1	T3	34.98	5.95	17
		3/4 EHS	A1b	T3	34.98	5.53	16
		3/4 EHS	A1a	T3a	34.98	6.33	18
		3/4 EHS	A1b	T3a	34.98	5.53	16
	235.70	3/4 EHS	A1	T3b	34.98	5.93	17
		3/4 EHS	A1a	T3b	34.98	6.33	18
		1 EHS	A1	83	62.7	10.27	16
		1 EHS	A1b	83a	62.7	9.63	15
		1 EHS	A1a	83b	62.7	10.93	17
		1 EHS	A1	102	62.7	10.18	16
	288.10	1 EHS	A1b	102a	62.7	9.39	15
		1 EHS	A1a	102b	62.7	10.96	17
	68.10	3/4 EHS	A1	25	34.98	7.32	21
		3/4 EHS	A1b	25a	34.98	6.7	19
		3/4 EHS	A1a	25b	34.98	7.32	21
		7/8 EHS	A1	49	47.82	8.86	19
		7/8 EHS	A1b	49a	47.82	8.01	17
		7/8 EHS	A1a	49b	47.82	8.86	19
1.2D + 1.0Di + 1.0Wi 180°	195.70	3/4 EHS	A1b	T3	34.98	5.49	16
		3/4 EHS	A1	T3	34.98	6.19	18
		3/4 EHS	A1b	T3a	34.98	5.49	16
		3/4 EHS	A1a	T3a	34.98	6.19	18
		3/4 EHS	A1	T3b	34.98	6.17	18
		3/4 EHS	A1a	T3b	34.98	6.18	18
	235.70	1 EHS	A1	83	62.7	10.66	17
		1 EHS	A1b	83a	62.7	9.55	15
		1 EHS	A1a	83b	62.7	10.66	17
	288.10	1 EHS	A1	102	62.7	10.64	17
		1 EHS	A1b	102a	62.7	9.29	15
		1 EHS	A1a	102b	62.7	10.64	17
	68.10	3/4 EHS	A1	25	34.98	7.5	21
		3/4 EHS	A1b	25a	34.98	6.89	20
		3/4 EHS	A1a	25b	34.98	6.89	20
	139.50	7/8 EHS	A1	49	47.82	9.12	19
		7/8 EHS	A1b	49a	47.82	8.26	17
		7/8 EHS	A1a	49b	47.82	8.26	17
1.2D + 1.0Di + 1.0Wi 210°	195.70	3/4 EHS	A1	T3	34.98	6.37	18
		3/4 EHS	A1b	T3	34.98	5.69	16
		3/4 EHS	A1b	T3a	34.98	5.7	16
		3/4 EHS	A1a	T3a	34.98	5.7	16
		3/4 EHS	A1	T3b	34.98	6.37	18
		3/4 EHS	A1a	T3b	34.98	5.69	16
	235.70	1 EHS	A1	83	62.7	11.01	18
		1 EHS	A1b	83a	62.7	9.89	16
		1 EHS	A1a	83b	62.7	9.89	16
	288.10	1 EHS	A1	102	62.7	11.06	18
		1 EHS	A1b	102a	62.7	9.72	15
		1 EHS	A1a	102b	62.7	9.72	15
	68.10	3/4 EHS	A1	25	34.98	7.46	21
		3/4 EHS	A1b	25a	34.98	7.1	20
		3/4 EHS	A1a	25b	34.98	6.75	19
	139.50	7/8 EHS	A1	49	47.82	9.06	19
		7/8 EHS	A1b	49a	47.82	8.55	18
		7/8 EHS	A1a	49b	47.82	8.08	17
	195.70	3/4 EHS	A1b	T3	34.98	5.93	17
		3/4 EHS	A1	T3	34.98	6.33	18
		3/4 EHS	A1a	T3a	34.98	5.53	16
		3/4 EHS	A1b	T3a	34.98	5.95	17
		3/4 EHS	A1a	T3b	34.98	5.53	16
		3/4 EHS	A1	T3b	34.98	6.32	18
	235.70	1 EHS	A1	83	62.7	10.92	17
		1 EHS	A1b	83a	62.7	10.27	16
		1 EHS	A1a	83b	62.7	9.63	15
	288.10	1 EHS	A1	102	62.7	10.96	17
		1 EHS	A1b	102a	62.7	10.18	16
		1 EHS	A1a	102b	62.7	9.39	15

ASSET: # 24516, FALLING CREEK FL

STANDARD

ANSI/TIA-222-H

CUSTOMER T-MOBILE

ENG NO.:

DETAILED CABLE FORCES

Load Case	Elev (ft)	Cable	Anchor Node	Tower Node	Allow Tension (kip)	Applied Tension (kip)	Use%
1.2D + 1.0Di + 1.0Wi 240°	68.10	3/4 EHS	A1	25	34.98	7.32	21
		3/4 EHS	A1b	25a	34.98	7.32	21
		3/4 EHS	A1a	25b	34.98	6.7	19
	139.50	7/8 EHS	A1	49	47.82	8.86	19
		7/8 EHS	A1b	49a	47.82	8.86	19
		7/8 EHS	A1a	49b	47.82	8.01	17
	195.70	3/4 EHS	A1b	T3	34.98	6.18	18
		3/4 EHS	A1	T3	34.98	6.17	18
		3/4 EHS	A1a	T3a	34.98	5.49	16
		3/4 EHS	A1b	T3a	34.98	6.19	18
		3/4 EHS	A1a	T3b	34.98	5.49	16
		3/4 EHS	A1	T3b	34.98	6.19	18
	235.70	1 EHS	A1	83	62.7	10.66	17
		1 EHS	A1b	83a	62.7	10.66	17
		1 EHS	A1a	83b	62.7	9.55	15
	288.10	1 EHS	A1	102	62.7	10.64	17
		1 EHS	A1b	102a	62.7	10.64	17
		1 EHS	A1a	102b	62.7	9.29	15
1.2D + 1.0Di + 1.0Wi 300°	68.10	3/4 EHS	A1	25	34.98	6.89	20
		3/4 EHS	A1b	25a	34.98	7.5	21
		3/4 EHS	A1a	25b	34.98	6.89	20
	139.50	7/8 EHS	A1	49	47.82	8.26	17
		7/8 EHS	A1b	49a	47.82	9.11	19
		7/8 EHS	A1a	49b	47.82	8.27	17
	195.70	3/4 EHS	A1b	T3	34.98	6.37	18
		3/4 EHS	A1	T3	34.98	5.69	16
		3/4 EHS	A1a	T3a	34.98	5.69	16
		3/4 EHS	A1b	T3a	34.98	6.37	18
		3/4 EHS	A1a	T3b	34.98	5.7	16
		3/4 EHS	A1	T3b	34.98	5.7	16
	235.70	1 EHS	A1	83	62.7	9.89	16
		1 EHS	A1b	83a	62.7	11.01	18
		1 EHS	A1a	83b	62.7	9.88	16
	288.10	1 EHS	A1	102	62.7	9.72	15
		1 EHS	A1b	102a	62.7	11.06	18
		1 EHS	A1a	102b	62.7	9.72	15
1.2D + 1.0Di + 1.0Wi 330°	68.10	3/4 EHS	A1	25	34.98	6.75	19
		3/4 EHS	A1b	25a	34.98	7.45	21
		3/4 EHS	A1a	25b	34.98	7.1	20
	139.50	7/8 EHS	A1	49	47.82	8.08	17
		7/8 EHS	A1b	49a	47.82	9.05	19
		7/8 EHS	A1a	49b	47.82	8.56	18
	195.70	3/4 EHS	A1	T3	34.98	5.54	16
		3/4 EHS	A1b	T3	34.98	6.32	18
		3/4 EHS	A1a	T3a	34.98	5.93	17
		3/4 EHS	A1b	T3a	34.98	6.32	18
		3/4 EHS	A1	T3b	34.98	5.54	16
		3/4 EHS	A1a	T3b	34.98	5.95	17
	235.70	1 EHS	A1	83	62.7	9.65	15
		1 EHS	A1b	83a	62.7	10.91	17
		1 EHS	A1a	83b	62.7	10.27	16
	288.10	1 EHS	A1	102	62.7	9.41	15
		1 EHS	A1b	102a	62.7	10.94	17
		1 EHS	A1a	102b	62.7	10.18	16
1.2D + 1.0Ev + 1.0Eh Normal	68.10	3/4 EHS	A1	25	34.98	5.56	16
		3/4 EHS	A1b	25a	34.98	5.66	16
		3/4 EHS	A1a	25b	34.98	5.66	16
	139.50	7/8 EHS	A1	49	47.82	6.96	15
		7/8 EHS	A1b	49a	47.82	7.2	15
		7/8 EHS	A1a	49b	47.82	7.2	15
	195.70	3/4 EHS	A1	T3	34.98	4.9	14
		3/4 EHS	A1b	T3	34.98	5.14	15
		3/4 EHS	A1b	T3a	34.98	5.14	15
		3/4 EHS	A1a	T3a	34.98	5.14	15
		3/4 EHS	A1	T3b	34.98	4.9	14
		3/4 EHS	A1a	T3b	34.98	5.14	15
	235.70	1 EHS	A1	83	62.7	8.93	14
		1 EHS	A1b	83a	62.7	9.42	15

ASSET: # 24516, FALLING CREEK FL

STANDARD

ANSI/TIA-222-H

CUSTOMER T-MOBILE

ENG NO.:

DETAILED CABLE FORCES

Load Case	Elev (ft)	Cable	Anchor Node	Tower Node	Allow Tension (kip)	Applied Tension (kip)	Use%
1.2D + 1.0Ev + 1.0Eh 60°	288.10	1 EHS	A1a	83b	62.7	9.42	15
		1 EHS	A1	102	62.7	8.94	14
		1 EHS	A1b	102a	62.7	9.47	15
		1 EHS	A1a	102b	62.7	9.47	15
	68.10	3/4 EHS	A1	25	34.98	5.59	16
		3/4 EHS	A1b	25a	34.98	5.59	16
		3/4 EHS	A1a	25b	34.98	5.69	16
		7/8 EHS	A1	49	47.82	7.04	15
	139.50	7/8 EHS	A1b	49a	47.82	7.04	15
		7/8 EHS	A1a	49b	47.82	7.28	15
		3/4 EHS	A1	T3	34.98	4.97	14
		3/4 EHS	A1b	T3	34.98	4.97	14
	195.70	3/4 EHS	A1b	T3a	34.98	4.98	14
		3/4 EHS	A1a	T3a	34.98	5.22	15
		3/4 EHS	A1	T3b	34.98	4.98	14
		3/4 EHS	A1a	T3b	34.98	5.22	15
1.2D + 1.0Ev + 1.0Eh 90°	235.70	1 EHS	A1	83	62.7	9.09	14
		1 EHS	A1b	83a	62.7	9.09	14
		1 EHS	A1a	83b	62.7	9.59	15
		1 EHS	A1	102	62.7	9.11	15
	288.10	1 EHS	A1b	102a	62.7	9.11	15
		1 EHS	A1a	102b	62.7	9.65	15
		3/4 EHS	A1	25	34.98	5.63	16
		3/4 EHS	A1b	25a	34.98	5.57	16
	68.10	3/4 EHS	A1a	25b	34.98	5.68	16
		7/8 EHS	A1	49	47.82	7.12	15
		7/8 EHS	A1b	49a	47.82	6.98	15
		7/8 EHS	A1a	49b	47.82	7.26	15
	139.50	3/4 EHS	A1	T3	34.98	5.05	14
		3/4 EHS	A1b	T3	34.98	4.92	14
		3/4 EHS	A1b	T3a	34.98	4.92	14
		3/4 EHS	A1a	T3a	34.98	5.2	15
1.2D + 1.0Ev + 1.0Eh 120°	195.70	3/4 EHS	A1	T3b	34.98	5.06	14
		3/4 EHS	A1a	T3b	34.98	5.2	15
		1 EHS	A1	83	62.7	9.26	15
		1 EHS	A1b	83a	62.7	8.97	14
	235.70	1 EHS	A1a	83b	62.7	9.55	15
		1 EHS	A1	102	62.7	9.29	15
		1 EHS	A1b	102a	62.7	8.98	14
		1 EHS	A1a	102b	62.7	9.61	15
	288.10	3/4 EHS	A1	25	34.98	5.66	16
		3/4 EHS	A1b	25a	34.98	5.56	16
		3/4 EHS	A1a	25b	34.98	5.66	16
		7/8 EHS	A1	49	47.82	7.2	15
	68.10	7/8 EHS	A1b	49a	47.82	6.96	15
		7/8 EHS	A1a	49b	47.82	7.2	15
		3/4 EHS	A1b	T3	34.98	4.9	14
		3/4 EHS	A1	T3	34.98	5.14	15
1.2D + 1.0Ev + 1.0Eh 180°	195.70	3/4 EHS	A1a	T3a	34.98	5.14	15
		3/4 EHS	A1b	T3a	34.98	4.9	14
		3/4 EHS	A1a	T3b	34.98	5.14	15
		3/4 EHS	A1	T3b	34.98	5.14	15
	235.70	1 EHS	A1	83	62.7	9.42	15
		1 EHS	A1b	83a	62.7	8.93	14
		1 EHS	A1a	83b	62.7	9.42	15
		1 EHS	A1	102	62.7	9.47	15
	288.10	1 EHS	A1b	102a	62.7	8.94	14
		1 EHS	A1a	102b	62.7	9.47	15
		3/4 EHS	A1	25	34.98	5.69	16
		3/4 EHS	A1b	25a	34.98	5.59	16
	68.10	3/4 EHS	A1a	25b	34.98	5.59	16
		7/8 EHS	A1	49	47.82	7.28	15
		7/8 EHS	A1b	49a	47.82	7.04	15
		7/8 EHS	A1a	49b	47.82	7.04	15
1.2D + 1.0Ev + 1.0Eh 180°	195.70	3/4 EHS	A1b	T3	34.98	4.98	14
		3/4 EHS	A1	T3	34.98	5.22	15
		3/4 EHS	A1b	T3a	34.98	4.97	14
		3/4 EHS	A1a	T3a	34.98	4.97	14

ASSET: # 24516, FALLING CREEK FL

STANDARD

ANSI/TIA-222-H

CUSTOMER T-MOBILE

ENG NO.:

DETAILED CABLE FORCES

Load Case	Elev (ft)	Cable	Anchor Node	Tower Node	Allow Tension (kip)	Applied Tension (kip)	Use%	
1.2D + 1.0Ev + 1.0Eh 210°	235.70	3/4 EHS	A1	T3b	34.98	5.22	15	
		3/4 EHS	A1a	T3b	34.98	4.98	14	
		1 EHS	A1	83	62.7	9.59	15	
		1 EHS	A1b	83a	62.7	9.09	14	
		1 EHS	A1a	83b	62.7	9.09	14	
		1 EHS	A1	102	62.7	9.65	15	
	288.10	1 EHS	A1b	102a	62.7	9.11	15	
		1 EHS	A1a	102b	62.7	9.11	15	
		3/4 EHS	A1	25	34.98	5.68	16	
	68.10	3/4 EHS	A1b	25a	34.98	5.63	16	
		3/4 EHS	A1a	25b	34.98	5.57	16	
		7/8 EHS	A1	49	47.82	7.26	15	
	139.50	7/8 EHS	A1b	49a	47.82	7.12	15	
		7/8 EHS	A1a	49b	47.82	6.98	15	
		3/4 EHS	A1b	T3	34.98	5.06	14	
	195.70	3/4 EHS	A1	T3	34.98	5.2	15	
		3/4 EHS	A1a	T3a	34.98	4.92	14	
		3/4 EHS	A1b	T3a	34.98	5.05	14	
	1.2D + 1.0Ev + 1.0Eh 240°	235.70	3/4 EHS	A1	T3b	34.98	5.2	15
			1 EHS	A1	83	62.7	9.55	15
			1 EHS	A1b	83a	62.7	9.26	15
		288.10	1 EHS	A1a	83b	62.7	8.97	14
			1 EHS	A1	102	62.7	9.61	15
			1 EHS	A1b	102a	62.7	9.29	15
68.10		1 EHS	A1a	102b	62.7	8.98	14	
		3/4 EHS	A1	25	34.98	5.66	16	
		3/4 EHS	A1b	25a	34.98	5.66	16	
139.50		3/4 EHS	A1a	25b	34.98	5.56	16	
		7/8 EHS	A1	49	47.82	7.2	15	
		7/8 EHS	A1b	49a	47.82	7.2	15	
195.70		7/8 EHS	A1a	49b	47.82	6.96	15	
		3/4 EHS	A1	T3	34.98	5.14	15	
		3/4 EHS	A1b	T3	34.98	5.14	15	
1.2D + 1.0Ev + 1.0Eh 300°		235.70	3/4 EHS	A1a	T3a	34.98	4.9	14
			3/4 EHS	A1b	T3a	34.98	5.14	15
			3/4 EHS	A1a	T3b	34.98	4.9	14
	288.10	3/4 EHS	A1	T3b	34.98	5.14	15	
		1 EHS	A1	83	62.7	9.42	15	
		1 EHS	A1b	83a	62.7	9.42	15	
	68.10	1 EHS	A1a	83b	62.7	8.93	14	
		1 EHS	A1	102	62.7	9.47	15	
		1 EHS	A1b	102a	62.7	9.47	15	
	1.2D + 1.0Ev + 1.0Eh 330°	235.70	1 EHS	A1a	102b	62.7	8.94	14
			3/4 EHS	A1	25	34.98	5.59	16
			3/4 EHS	A1b	25a	34.98	5.69	16
139.50		3/4 EHS	A1a	25b	34.98	5.59	16	
		7/8 EHS	A1	49	47.82	7.04	15	
		7/8 EHS	A1b	49a	47.82	7.28	15	
195.70		7/8 EHS	A1a	49b	47.82	7.04	15	
		3/4 EHS	A1b	T3	34.98	5.22	15	
		3/4 EHS	A1	T3	34.98	4.98	14	
288.10		3/4 EHS	A1b	T3a	34.98	5.22	15	
		3/4 EHS	A1a	T3a	34.98	4.98	14	
		3/4 EHS	A1	T3b	34.98	4.97	14	

ASSET: # 24516, FALLING CREEK FL

STANDARD

ANSI/TIA-222-H

CUSTOMER T-MOBILE

ENG NO.:

DETAILED CABLE FORCES

Load Case	Elev (ft)	Cable	Anchor Node	Tower Node	Allow Tension (kip)	Applied Tension (kip)	Use%
1.0D + 1.0W Service Normal	195.70	3/4 EHS	A1b	T3	34.98	5.2	15
		3/4 EHS	A1	T3	34.98	4.92	14
		3/4 EHS	A1a	T3a	34.98	5.06	14
		3/4 EHS	A1b	T3a	34.98	5.2	15
		3/4 EHS	A1a	T3b	34.98	5.05	14
		3/4 EHS	A1	T3b	34.98	4.92	14
	235.70	1 EHS	A1	83	62.7	8.97	14
		1 EHS	A1b	83a	62.7	9.55	15
		1 EHS	A1a	83b	62.7	9.26	15
	288.10	1 EHS	A1	102	62.7	8.98	14
		1 EHS	A1b	102a	62.7	9.61	15
		1 EHS	A1a	102b	62.7	9.29	15
	68.10	3/4 EHS	A1	25	34.98	4.55	13
		3/4 EHS	A1b	25a	34.98	6.29	18
		3/4 EHS	A1a	25b	34.98	6.29	18
	139.50	7/8 EHS	A1	49	47.82	5.61	12
		7/8 EHS	A1b	49a	47.82	8.1	17
		7/8 EHS	A1a	49b	47.82	8.1	17
	195.70	3/4 EHS	A1	T3	34.98	3.87	11
		3/4 EHS	A1b	T3	34.98	5.92	17
		3/4 EHS	A1b	T3a	34.98	5.9	17
		3/4 EHS	A1a	T3a	34.98	5.9	17
		3/4 EHS	A1	T3b	34.98	3.87	11
		3/4 EHS	A1a	T3b	34.98	5.92	17
	235.70	1 EHS	A1	83	62.7	7.16	11
		1 EHS	A1b	83a	62.7	10.62	17
		1 EHS	A1a	83b	62.7	10.62	17
	288.10	1 EHS	A1	102	62.7	6.67	11
		1 EHS	A1b	102a	62.7	10.99	18
		1 EHS	A1a	102b	62.7	10.99	18
1.0D + 1.0W Service 60°	68.10	3/4 EHS	A1	25	34.98	5.11	15
		3/4 EHS	A1b	25a	34.98	5.12	15
		3/4 EHS	A1a	25b	34.98	6.78	19
	139.50	7/8 EHS	A1	49	47.82	6.39	13
		7/8 EHS	A1b	49a	47.82	6.4	13
		7/8 EHS	A1a	49b	47.82	8.87	19
	195.70	3/4 EHS	A1	T3	34.98	4.62	13
		3/4 EHS	A1b	T3	34.98	4.62	13
		3/4 EHS	A1b	T3a	34.98	4.58	13
		3/4 EHS	A1a	T3a	34.98	6.51	19
		3/4 EHS	A1	T3b	34.98	4.59	13
		3/4 EHS	A1a	T3b	34.98	6.51	19
	235.70	1 EHS	A1	83	62.7	8.31	13
		1 EHS	A1b	83a	62.7	8.3	13
		1 EHS	A1a	83b	62.7	11.81	19
	288.10	1 EHS	A1	102	62.7	8.25	13
		1 EHS	A1b	102a	62.7	8.24	13
		1 EHS	A1a	102b	62.7	12.41	20
1.0D + 1.0W Service 90°	68.10	3/4 EHS	A1	25	34.98	5.69	16
		3/4 EHS	A1b	25a	34.98	4.71	13
		3/4 EHS	A1a	25b	34.98	6.65	19
	139.50	7/8 EHS	A1	49	47.82	7.21	15
		7/8 EHS	A1b	49a	47.82	5.85	12
		7/8 EHS	A1a	49b	47.82	8.67	18
	195.70	3/4 EHS	A1	T3	34.98	5.29	15
		3/4 EHS	A1b	T3	34.98	4.08	12
		3/4 EHS	A1b	T3a	34.98	4.08	12
		3/4 EHS	A1a	T3a	34.98	6.34	18
		3/4 EHS	A1	T3b	34.98	5.24	15
		3/4 EHS	A1a	T3b	34.98	6.36	18
	235.70	1 EHS	A1	83	62.7	9.43	15
		1 EHS	A1b	83a	62.7	7.48	12
		1 EHS	A1a	83b	62.7	11.49	18
	288.10	1 EHS	A1	102	62.7	9.61	15
		1 EHS	A1b	102a	62.7	7.14	11
		1 EHS	A1a	102b	62.7	12.02	19
1.0D + 1.0W Service 120°	68.10	3/4 EHS	A1	25	34.98	6.29	18
		3/4 EHS	A1b	25a	34.98	4.56	13

ASSET: # 24516, FALLING CREEK FL

STANDARD

ANSI/TIA-222-H

CUSTOMER T-MOBILE

ENG NO.:

DETAILED CABLE FORCES

Load Case	Elev (ft)	Cable	Anchor Node	Tower Node	Allow Tension (kip)	Applied Tension (kip)	Use%	
1.0D + 1.0W Service 180°	139.50	3/4 EHS	A1a	25b	34.98	6.28	18	
		7/8 EHS	A1	49	47.82	8.1	17	
		7/8 EHS	A1b	49a	47.82	5.63	12	
	195.70	7/8 EHS	A1a	49b	47.82	8.08	17	
		3/4 EHS	A1b	T3	34.98	3.87	11	
		3/4 EHS	A1	T3	34.98	5.91	17	
	235.70	3/4 EHS	A1a	T3a	34.98	5.92	17	
		3/4 EHS	A1b	T3a	34.98	3.87	11	
		3/4 EHS	A1a	T3b	34.98	5.91	17	
	288.10	3/4 EHS	A1	T3b	34.98	5.9	17	
		1 EHS	A1	83	62.7	10.61	17	
		1 EHS	A1b	83a	62.7	7.17	11	
	68.10	1 EHS	A1a	83b	62.7	10.62	17	
		3/4 EHS	A1	102	62.7	10.98	18	
		3/4 EHS	A1b	102a	62.7	6.69	11	
	1.0D + 1.0W Service 210°	139.50	3/4 EHS	A1a	102b	62.7	10.98	18
			7/8 EHS	A1	25	34.98	6.78	19
			7/8 EHS	A1b	25a	34.98	5.11	15
		195.70	7/8 EHS	A1a	25b	34.98	5.11	15
			3/4 EHS	A1	49	47.82	8.89	19
			3/4 EHS	A1b	49a	47.82	6.39	13
		235.70	3/4 EHS	A1a	49b	47.82	6.39	13
			3/4 EHS	A1	T3	34.98	6.51	19
			3/4 EHS	A1b	T3	34.98	4.58	13
		288.10	3/4 EHS	A1b	T3a	34.98	4.62	13
			3/4 EHS	A1a	T3a	34.98	4.62	13
			3/4 EHS	A1	T3b	34.98	6.51	19
		68.10	3/4 EHS	A1a	T3b	34.98	4.58	13
			1 EHS	A1	83	62.7	11.82	19
			1 EHS	A1b	83a	62.7	8.3	13
		139.50	1 EHS	A1a	83b	62.7	8.3	13
			3/4 EHS	A1	102	62.7	12.42	20
			3/4 EHS	A1b	102a	62.7	8.24	13
		1.0D + 1.0W Service 240°	139.50	3/4 EHS	A1a	102b	62.7	8.24
7/8 EHS				A1	25	34.98	6.66	19
7/8 EHS				A1b	25a	34.98	5.69	16
195.70			7/8 EHS	A1a	25b	34.98	4.71	13
			3/4 EHS	A1	49	47.82	8.68	18
			3/4 EHS	A1b	49a	47.82	7.2	15
235.70			3/4 EHS	A1a	49b	47.82	5.84	12
			3/4 EHS	A1	T3	34.98	6.36	18
			3/4 EHS	A1b	T3	34.98	5.24	15
288.10			3/4 EHS	A1a	T3a	34.98	4.08	12
			3/4 EHS	A1b	T3a	34.98	5.29	15
			3/4 EHS	A1	T3b	34.98	6.34	18
68.10			3/4 EHS	A1a	T3b	34.98	4.08	12
			1 EHS	A1	83	62.7	11.48	18
			1 EHS	A1b	83a	62.7	9.43	15
139.50			1 EHS	A1a	83b	62.7	7.49	12
	3/4 EHS		A1	102	62.7	12.02	19	
	3/4 EHS		A1b	102a	62.7	9.62	15	
1.0D + 1.0W Service 270°	139.50		3/4 EHS	A1a	102b	62.7	7.15	11
			7/8 EHS	A1	25	34.98	6.29	18
			7/8 EHS	A1b	25a	34.98	6.28	18
	195.70		7/8 EHS	A1a	25b	34.98	4.56	13
			3/4 EHS	A1	49	47.82	8.1	17
			3/4 EHS	A1b	49a	47.82	8.08	17
	235.70		3/4 EHS	A1a	49b	47.82	5.63	12
			3/4 EHS	A1	T3	34.98	5.9	17
			3/4 EHS	A1b	T3	34.98	5.91	17
	288.10		3/4 EHS	A1a	T3a	34.98	3.87	11
			3/4 EHS	A1b	T3a	34.98	5.92	17
			3/4 EHS	A1a	T3b	34.98	3.87	11
	68.10		3/4 EHS	A1	T3b	34.98	5.91	17
			1 EHS	A1	83	62.7	10.61	17
			1 EHS	A1b	83a	62.7	10.62	17
	139.50		1 EHS	A1a	83b	62.7	7.17	11
		3/4 EHS	A1	102	62.7	10.98	18	

ASSET: # 24516, FALLING CREEK FL
 CUSTOMER T-MOBILE

STANDARD ANSI/TIA-222-H
 ENG NO.:

DETAILED CABLE FORCES

Load Case	Elev (ft)	Cable	Anchor Node	Tower Node	Allow Tension (kip)	Applied Tension (kip)	Use%
1.0D + 1.0W Service 300°	68.10	1 EHS	A1b	102a	62.7	10.98	18
		1 EHS	A1a	102b	62.7	6.69	11
		3/4 EHS	A1	25	34.98	5.11	15
		3/4 EHS	A1b	25a	34.98	6.78	19
		3/4 EHS	A1a	25b	34.98	5.12	15
		7/8 EHS	A1	49	47.82	6.39	13
	139.50	7/8 EHS	A1b	49a	47.82	8.87	19
		7/8 EHS	A1a	49b	47.82	6.4	13
		3/4 EHS	A1b	T3	34.98	6.51	19
	195.70	3/4 EHS	A1	T3	34.98	4.59	13
		3/4 EHS	A1b	T3a	34.98	6.51	19
		3/4 EHS	A1a	T3a	34.98	4.58	13
		3/4 EHS	A1	T3b	34.98	4.62	13
		3/4 EHS	A1a	T3b	34.98	4.62	13
		1 EHS	A1	83	62.7	8.31	13
	235.70	1 EHS	A1b	83a	62.7	11.81	19
		1 EHS	A1a	83b	62.7	8.3	13
		1 EHS	A1	102	62.7	8.25	13
1.0D + 1.0W Service 330°	288.10	1 EHS	A1b	102a	62.7	12.41	20
		1 EHS	A1a	102b	62.7	8.24	13
		3/4 EHS	A1	25	34.98	4.71	13
	68.10	3/4 EHS	A1b	25a	34.98	6.66	19
		3/4 EHS	A1a	25b	34.98	5.69	16
		7/8 EHS	A1	49	47.82	5.83	12
		7/8 EHS	A1b	49a	47.82	8.68	18
		7/8 EHS	A1a	49b	47.82	7.22	15
		3/4 EHS	A1	T3	34.98	4.09	12
	195.70	3/4 EHS	A1b	T3	34.98	6.34	18
		3/4 EHS	A1b	T3a	34.98	6.36	18
		3/4 EHS	A1a	T3a	34.98	5.24	15
		3/4 EHS	A1a	T3b	34.98	5.28	15
		3/4 EHS	A1	T3b	34.98	4.08	12
		1 EHS	A1	83	62.7	7.49	12
	235.70	1 EHS	A1b	83a	62.7	11.49	18
		1 EHS	A1a	83b	62.7	9.42	15
		1 EHS	A1	102	62.7	7.15	11
288.10	1 EHS	A1b	102a	62.7	12.02	19	
	1 EHS	A1a	102b	62.7	9.61	15	

MAXIMUM CABLE FORCES SUMMARY

Load Case	Elevation (ft)	Cable	Anchor Node	Tower Node	Allowed Tension (kip)	Applied Tension (kip)	Use (%)
1.2D + 1.0W 60°	68.10	3/4 EHS	A1a	25b	34.98	10.62	30
1.2D + 1.0W 180°	139.50	7/8 EHS	A1	49	47.82	15.59	33
1.2D + 1.0W 60°	195.70	3/4 EHS	A1a	T3a	34.98	12.20	35
1.2D + 1.0W 60°	235.70	1 EHS	A1a	83b	62.70	22.06	35
1.2D + 1.0W 60°	288.10	1 EHS	A1a	102b	62.70	24.60	39

MAXIMUM TORQUE ARM STRESS SUMMARY

Load Case	Elevation (ft)	Member	Type	Compression %	Tension %
1.2D + 1.0W Normal	68.00	3X3X0.5	Horiz	0	6
1.2D + 1.0W Normal	139.30	3X3X0.5	Horiz	0	7
1.2D + 1.0W Normal	196.00	C10 x 20	Torque Arm	0	5
1.2D + 1.0W 60°	196.00	C10 x 20	Lower Kicker	9	0
1.2D + 1.0W Normal	236.00	3X3X0.5	Horiz	0	6
1.2D + 1.0W Normal	288.00	3X3X0.5	Horiz	0	6

ASSET: # 24516, FALLING CREEK FL

STANDARD

ANSI/TIA-222-H

CUSTOMER T-MOBILE

ENG NO.:

DEFLECTIONS AND ROTATIONS

Load Case	Elevation (ft)	Deflection (ft)	Twist (deg)	Sway (deg)	Resultant (deg)
1.2D + 1.0W Normal 117 mph wind with no ice	175.70	0.2182	0.0002	0.0343	0.0343
1.2D + 1.0W Normal 117 mph wind with no ice	195.70	0.2713	0.0022	0.1846	0.1846
1.2D + 1.0W Normal 117 mph wind with no ice	248.10	0.5666	0.0004	0.4064	0.4064
1.2D + 1.0W Normal 117 mph wind with no ice	300.00	0.9346	0.0011	0.6707	0.6707
1.2D + 1.0W 60° 117 mph wind with no ice	175.70	0.2779	-0.0017	0.2109	0.2109
1.2D + 1.0W 60° 117 mph wind with no ice	195.70	0.3207	-0.0029	0.1461	0.1461
1.2D + 1.0W 60° 117 mph wind with no ice	248.10	0.5468	-0.0017	0.3047	0.3047
1.2D + 1.0W 60° 117 mph wind with no ice	300.00	0.8107	-0.0029	0.5482	0.5482
1.2D + 1.0W 90° 117 mph wind with no ice	175.70	0.2602	0.0563	0.2563	0.2622
1.2D + 1.0W 90° 117 mph wind with no ice	195.70	0.3085	0.0538	0.1700	0.1700
1.2D + 1.0W 90° 117 mph wind with no ice	248.10	0.5692	0.0620	0.3562	0.3611
1.2D + 1.0W 90° 117 mph wind with no ice	300.00	0.8839	0.0683	0.6222	0.6222
1.2D + 1.0W 120° 117 mph wind with no ice	175.70	0.2186	0.0017	0.2309	0.2309
1.2D + 1.0W 120° 117 mph wind with no ice	195.70	0.2732	0.0033	0.1889	0.1889
1.2D + 1.0W 120° 117 mph wind with no ice	248.10	0.5702	0.0013	0.4068	0.4068
1.2D + 1.0W 120° 117 mph wind with no ice	300.00	0.9378	0.0020	0.6701	0.6701
1.2D + 1.0W 180° 117 mph wind with no ice	175.70	0.2776	0.0001	0.0140	0.0140
1.2D + 1.0W 180° 117 mph wind with no ice	195.70	0.3194	0.0017	0.1430	0.1430
1.2D + 1.0W 180° 117 mph wind with no ice	248.10	0.5448	0.0007	0.3052	0.3052
1.2D + 1.0W 180° 117 mph wind with no ice	300.00	0.8097	0.0020	0.5494	0.5494
1.2D + 1.0W 210° 117 mph wind with no ice	175.70	0.2598	0.0547	0.1403	0.1500
1.2D + 1.0W 210° 117 mph wind with no ice	195.70	0.307	0.0526	0.1669	0.1741
1.2D + 1.0W 210° 117 mph wind with no ice	248.10	0.5669	0.0610	0.3564	0.3611
1.2D + 1.0W 210° 117 mph wind with no ice	300.00	0.8823	0.0674	0.6232	0.6268
1.2D + 1.0W 240° 117 mph wind with no ice	175.70	0.2186	-0.0017	0.2309	0.2309
1.2D + 1.0W 240° 117 mph wind with no ice	195.70	0.2732	-0.0033	0.1889	0.1889
1.2D + 1.0W 240° 117 mph wind with no ice	248.10	0.5702	-0.0013	0.4068	0.4068
1.2D + 1.0W 240° 117 mph wind with no ice	300.00	0.9378	-0.0020	0.6701	0.6701
1.2D + 1.0W 300° 117 mph wind with no ice	175.70	0.2779	0.0017	0.2109	0.2109
1.2D + 1.0W 300° 117 mph wind with no ice	195.70	0.3207	0.0029	0.1461	0.1461
1.2D + 1.0W 300° 117 mph wind with no ice	248.10	0.5468	0.0017	0.3047	0.3047
1.2D + 1.0W 300° 117 mph wind with no ice	300.00	0.8107	0.0029	0.5482	0.5482
1.2D + 1.0W 330° 117 mph wind with no ice	175.70	0.2599	0.0578	0.1211	0.1341
1.2D + 1.0W 330° 117 mph wind with no ice	195.70	0.3068	0.0550	0.1656	0.1741
1.2D + 1.0W 330° 117 mph wind with no ice	248.10	0.5659	0.0631	0.3559	0.3611
1.2D + 1.0W 330° 117 mph wind with no ice	300.00	0.8809	0.0693	0.6229	0.6268
1.2D + 1.0Di + 1.0Wi Normal 30 mph wind with 0.25" radial ice	175.70	0.013	0.0000	0.0068	0.0068
1.2D + 1.0Di + 1.0Wi Normal 30 mph wind with 0.25" radial ice	195.70	0.0132	0.0002	0.0024	0.0024
1.2D + 1.0Di + 1.0Wi Normal 30 mph wind with 0.25" radial ice	248.10	0.0224	0.0001	0.0129	0.0129
1.2D + 1.0Di + 1.0Wi Normal 30 mph wind with 0.25" radial ice	300.00	0.0311	0.0002	0.0273	0.0273
1.2D + 1.0Di + 1.0Wi 60° 30 mph wind with 0.25" radial ice	175.70	0.0145	0.0000	0.0096	0.0096
1.2D + 1.0Di + 1.0Wi 60° 30 mph wind with 0.25" radial ice	195.70	0.0152	0.0002	0.0037	0.0037
1.2D + 1.0Di + 1.0Wi 60° 30 mph wind with 0.25" radial ice	248.10	0.0252	0.0001	0.0137	0.0137
1.2D + 1.0Di + 1.0Wi 60° 30 mph wind with 0.25" radial ice	300.00	0.035	0.0002	0.0284	0.0284
1.2D + 1.0Di + 1.0Wi 90° 30 mph wind with 0.25" radial ice	175.70	0.0136	0.0032	0.0098	0.0100
1.2D + 1.0Di + 1.0Wi 90° 30 mph wind with 0.25" radial ice	195.70	0.0141	0.0029	0.0032	0.0041
1.2D + 1.0Di + 1.0Wi 90° 30 mph wind with 0.25" radial ice	248.10	0.0237	0.0043	0.0133	0.0141
1.2D + 1.0Di + 1.0Wi 90° 30 mph wind with 0.25" radial ice	300.00	0.0329	0.0053	0.0288	0.0290
1.2D + 1.0Di + 1.0Wi 120° 30 mph wind with 0.25" radial ice	175.70	0.0128	0.0000	0.0085	0.0085
1.2D + 1.0Di + 1.0Wi 120° 30 mph wind with 0.25" radial ice	195.70	0.0129	0.0002	0.0023	0.0023
1.2D + 1.0Di + 1.0Wi 120° 30 mph wind with 0.25" radial ice	248.10	0.0217	0.0001	0.0123	0.0123
1.2D + 1.0Di + 1.0Wi 120° 30 mph wind with 0.25" radial ice	300.00	0.03	0.0002	0.0268	0.0268
1.2D + 1.0Di + 1.0Wi 180° 30 mph wind with 0.25" radial ice	175.70	0.0145	0.0000	0.0058	0.0058
1.2D + 1.0Di + 1.0Wi 180° 30 mph wind with 0.25" radial ice	195.70	0.0151	0.0002	0.0035	0.0035
1.2D + 1.0Di + 1.0Wi 180° 30 mph wind with 0.25" radial ice	248.10	0.0251	0.0001	0.0138	0.0138
1.2D + 1.0Di + 1.0Wi 180° 30 mph wind with 0.25" radial ice	300.00	0.035	0.0002	0.0285	0.0285
1.2D + 1.0Di + 1.0Wi 210° 30 mph wind with 0.25" radial ice	175.70	0.0136	0.0032	0.0067	0.0074
1.2D + 1.0Di + 1.0Wi 210° 30 mph wind with 0.25" radial ice	195.70	0.014	0.0029	0.0030	0.0041
1.2D + 1.0Di + 1.0Wi 210° 30 mph wind with 0.25" radial ice	248.10	0.0236	0.0043	0.0133	0.0141
1.2D + 1.0Di + 1.0Wi 210° 30 mph wind with 0.25" radial ice	300.00	0.0329	0.0053	0.0289	0.0294
1.2D + 1.0Di + 1.0Wi 240° 30 mph wind with 0.25" radial ice	175.70	0.0128	0.0000	0.0085	0.0085
1.2D + 1.0Di + 1.0Wi 240° 30 mph wind with 0.25" radial ice	195.70	0.0129	0.0002	0.0023	0.0023
1.2D + 1.0Di + 1.0Wi 240° 30 mph wind with 0.25" radial ice	248.10	0.0217	0.0001	0.0123	0.0123
1.2D + 1.0Di + 1.0Wi 240° 30 mph wind with 0.25" radial ice	300.00	0.03	0.0002	0.0268	0.0268
1.2D + 1.0Di + 1.0Wi 300° 30 mph wind with 0.25" radial ice	175.70	0.0145	0.0000	0.0096	0.0096
1.2D + 1.0Di + 1.0Wi 300° 30 mph wind with 0.25" radial ice	195.70	0.0152	0.0002	0.0037	0.0037

ASSET: # 24516, FALLING CREEK FL

STANDARD

ANSI/TIA-222-H

CUSTOMER T-MOBILE

ENG NO.:

DEFLECTIONS AND ROTATIONS

Load Case	Elevation (ft)	Deflection (ft)	Twist (deg)	Sway (deg)	Resultant (deg)
1.2D + 1.0Di + 1.0Wi 300° 30 mph wind with 0.25" radial ice	248.10	0.0252	0.0001	0.0137	0.013
1.2D + 1.0Di + 1.0Wi 300° 30 mph wind with 0.25" radial ice	300.00	0.035	0.0002	0.0284	0.028
1.2D + 1.0Di + 1.0Wi 330° 30 mph wind with 0.25" radial ice	175.70	0.0133	0.0029	0.0082	0.008
1.2D + 1.0Di + 1.0Wi 330° 30 mph wind with 0.25" radial ice	195.70	0.0137	0.0027	0.0028	0.003
1.2D + 1.0Di + 1.0Wi 330° 30 mph wind with 0.25" radial ice	248.10	0.0228	0.0040	0.0128	0.013
1.2D + 1.0Di + 1.0Wi 330° 30 mph wind with 0.25" radial ice	300.00	0.0317	0.0049	0.0284	0.028
1.2D + 1.0Ev + 1.0Eh Normal Seismic	175.70	0.0073	0.0000	0.0050	0.00
1.2D + 1.0Ev + 1.0Eh Normal Seismic	195.70	0.009	0.0001	0.0059	0.005
1.2D + 1.0Ev + 1.0Eh Normal Seismic	248.10	0.017	0.0000	0.0094	0.009
1.2D + 1.0Ev + 1.0Eh Normal Seismic	300.00	0.0224	0.0000	0.0070	0.00
1.2D + 1.0Ev + 1.0Eh 60° Seismic	175.70	0.0072	0.0000	0.0052	0.005
1.2D + 1.0Ev + 1.0Eh 60° Seismic	195.70	0.0089	0.0001	0.0057	0.005
1.2D + 1.0Ev + 1.0Eh 60° Seismic	248.10	0.0168	0.0000	0.0093	0.009
1.2D + 1.0Ev + 1.0Eh 60° Seismic	300.00	0.0222	0.0000	0.0068	0.006
1.2D + 1.0Ev + 1.0Eh 90° Seismic	175.70	0.0072	0.0000	0.0052	0.005
1.2D + 1.0Ev + 1.0Eh 90° Seismic	195.70	0.0089	0.0001	0.0058	0.005
1.2D + 1.0Ev + 1.0Eh 90° Seismic	248.10	0.0169	0.0000	0.0094	0.009
1.2D + 1.0Ev + 1.0Eh 90° Seismic	300.00	0.0223	0.0000	0.0070	0.00
1.2D + 1.0Ev + 1.0Eh 120° Seismic	175.70	0.0073	0.0000	0.0050	0.00
1.2D + 1.0Ev + 1.0Eh 120° Seismic	195.70	0.009	0.0001	0.0059	0.005
1.2D + 1.0Ev + 1.0Eh 120° Seismic	248.10	0.017	0.0000	0.0094	0.009
1.2D + 1.0Ev + 1.0Eh 120° Seismic	300.00	0.0224	0.0000	0.0070	0.00
1.2D + 1.0Ev + 1.0Eh 180° Seismic	175.70	0.0072	0.0000	0.0052	0.005
1.2D + 1.0Ev + 1.0Eh 180° Seismic	195.70	0.0089	0.0001	0.0057	0.005
1.2D + 1.0Ev + 1.0Eh 180° Seismic	248.10	0.0168	0.0000	0.0093	0.009
1.2D + 1.0Ev + 1.0Eh 180° Seismic	300.00	0.0222	0.0000	0.0068	0.006
1.2D + 1.0Ev + 1.0Eh 210° Seismic	175.70	0.0072	0.0000	0.0052	0.005
1.2D + 1.0Ev + 1.0Eh 210° Seismic	195.70	0.0089	0.0001	0.0058	0.005
1.2D + 1.0Ev + 1.0Eh 210° Seismic	248.10	0.0169	0.0000	0.0094	0.009
1.2D + 1.0Ev + 1.0Eh 210° Seismic	300.00	0.0223	0.0000	0.0070	0.00
1.2D + 1.0Ev + 1.0Eh 240° Seismic	175.70	0.0073	0.0000	0.0050	0.00
1.2D + 1.0Ev + 1.0Eh 240° Seismic	195.70	0.009	0.0001	0.0059	0.005
1.2D + 1.0Ev + 1.0Eh 240° Seismic	248.10	0.017	0.0000	0.0094	0.009
1.2D + 1.0Ev + 1.0Eh 240° Seismic	300.00	0.0224	0.0000	0.0070	0.00
1.2D + 1.0Ev + 1.0Eh 300° Seismic	175.70	0.0072	0.0000	0.0052	0.005
1.2D + 1.0Ev + 1.0Eh 300° Seismic	195.70	0.0089	0.0001	0.0057	0.005
1.2D + 1.0Ev + 1.0Eh 300° Seismic	248.10	0.0168	0.0000	0.0093	0.009
1.2D + 1.0Ev + 1.0Eh 300° Seismic	300.00	0.0222	0.0000	0.0068	0.006
1.2D + 1.0Ev + 1.0Eh 330° Seismic	175.70	0.0072	0.0000	0.0052	0.005
1.2D + 1.0Ev + 1.0Eh 330° Seismic	195.70	0.0089	0.0001	0.0058	0.005
1.2D + 1.0Ev + 1.0Eh 330° Seismic	248.10	0.0169	0.0000	0.0094	0.009
1.2D + 1.0Ev + 1.0Eh 330° Seismic	300.00	0.0223	0.0000	0.0070	0.00
1.0D + 1.0W Service Normal 60 mph Wind with No Ice	175.70	0.0383	0.0001	0.0252	0.025
1.0D + 1.0W Service Normal 60 mph Wind with No Ice	195.70	0.0394	0.0005	0.0091	0.009
1.0D + 1.0W Service Normal 60 mph Wind with No Ice	248.10	0.0709	0.0002	0.0456	0.045
1.0D + 1.0W Service Normal 60 mph Wind with No Ice	300.00	0.1058	0.0004	0.1058	0.105
1.0D + 1.0W Service 60° 60 mph Wind with No Ice	175.70	0.0496	-0.0001	0.0411	0.041
1.0D + 1.0W Service 60° 60 mph Wind with No Ice	195.70	0.0544	-0.0005	0.0195	0.019
1.0D + 1.0W Service 60° 60 mph Wind with No Ice	248.10	0.0941	-0.0002	0.0552	0.055
1.0D + 1.0W Service 60° 60 mph Wind with No Ice	300.00	0.1394	0.0004	0.1170	0.11
1.0D + 1.0W Service 90° 60 mph Wind with No Ice	175.70	0.0441	0.0103	0.0419	0.043
1.0D + 1.0W Service 90° 60 mph Wind with No Ice	195.70	0.0474	0.0096	0.0157	0.018
1.0D + 1.0W Service 90° 60 mph Wind with No Ice	248.10	0.0834	0.0132	0.0507	0.052
1.0D + 1.0W Service 90° 60 mph Wind with No Ice	300.00	0.1239	0.0157	0.1152	0.116
1.0D + 1.0W Service 120° 60 mph Wind with No Ice	175.70	0.0381	0.0001	0.0336	0.033
1.0D + 1.0W Service 120° 60 mph Wind with No Ice	195.70	0.0393	0.0005	0.0095	0.009
1.0D + 1.0W Service 120° 60 mph Wind with No Ice	248.10	0.0704	-0.0002	0.0448	0.044
1.0D + 1.0W Service 120° 60 mph Wind with No Ice	300.00	0.1047	0.0004	0.1049	0.104
1.0D + 1.0W Service 180° 60 mph Wind with No Ice	175.70	0.0497	0.0001	0.0154	0.015
1.0D + 1.0W Service 180° 60 mph Wind with No Ice	195.70	0.0544	0.0005	0.0191	0.019
1.0D + 1.0W Service 180° 60 mph Wind with No Ice	248.10	0.0944	0.0001	0.0560	0.056
1.0D + 1.0W Service 180° 60 mph Wind with No Ice	300.00	0.1405	0.0004	0.1180	0.11
1.0D + 1.0W Service 210° 60 mph Wind with No Ice	175.70	0.044	0.0103	0.0227	0.024
1.0D + 1.0W Service 210° 60 mph Wind with No Ice	195.70	0.0471	0.0096	0.0148	0.017
1.0D + 1.0W Service 210° 60 mph Wind with No Ice	248.10	0.083	0.0133	0.0509	0.052
1.0D + 1.0W Service 210° 60 mph Wind with No Ice	300.00	0.1237	0.0158	0.1156	0.116
1.0D + 1.0W Service 240° 60 mph Wind with No Ice	175.70	0.0381	0.0001	0.0336	0.033
1.0D + 1.0W Service 240° 60 mph Wind with No Ice	195.70	0.0393	0.0005	0.0095	0.009

DEFLECTIONS AND ROTATIONS

Load Case	Elevation (ft)	Deflection (ft)	Twist (deg)	Sway (deg)	Resultan (deg)
1.0D + 1.0W Service 240° 60 mph Wind with No Ice	248.10	0.0704	0.0002	0.0448	0.0448
1.0D + 1.0W Service 240° 60 mph Wind with No Ice	300.00	0.1047	0.0004	0.1049	0.1049
1.0D + 1.0W Service 300° 60 mph Wind with No Ice	175.70	0.0496	0.0001	0.0411	0.0411
1.0D + 1.0W Service 300° 60 mph Wind with No Ice	195.70	0.0544	0.0005	0.0195	0.0195
1.0D + 1.0W Service 300° 60 mph Wind with No Ice	248.10	0.0941	0.0002	0.0552	0.0552
1.0D + 1.0W Service 300° 60 mph Wind with No Ice	300.00	0.1394	0.0004	0.1170	0.1170
1.0D + 1.0W Service 330° 60 mph Wind with No Ice	175.70	0.044	0.0103	0.0329	0.0329
1.0D + 1.0W Service 330° 60 mph Wind with No Ice	195.70	0.0472	0.0096	0.0151	0.0171
1.0D + 1.0W Service 330° 60 mph Wind with No Ice	248.10	0.0831	0.0133	0.0509	0.0520
1.0D + 1.0W Service 330° 60 mph Wind with No Ice	300.00	0.1237	0.0158	0.1156	0.1160

MAXIMUM REACTIONS SUMMARY

Anchor Group	Uplift	Shear
BASE	162.72	1.89
A1	67.11	65.23

Pad & Pier Foundation Analysis (ANSI/TIA-222-H)

Foundation & Soil Parameters

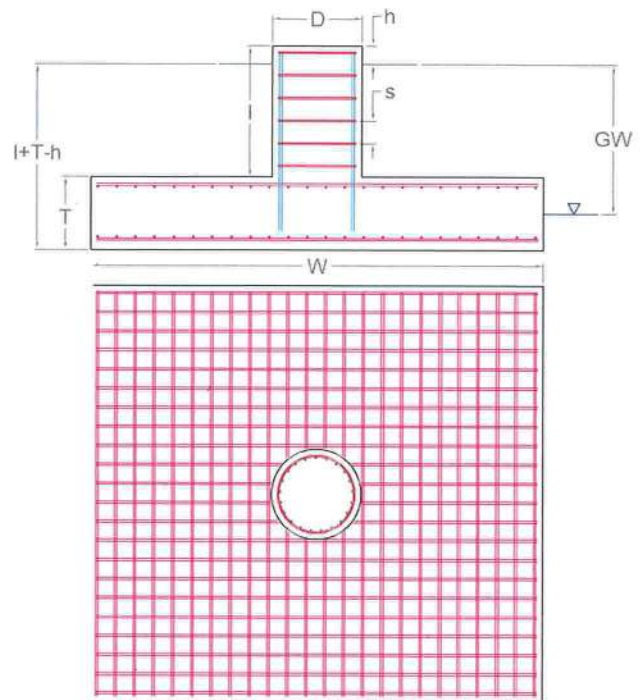
Ignore Rebar?		N	
Pier Diameter	D	3.00	ft
Pier Height Above Ground	h	0.5	ft
Pad Base Depth	$l+T-h$	12.0	ft
Pad Width	W	13.0	ft
Pad Thickness	T	2.0	ft
Water Table Depth [BGL]	GW	10	ft
Unit Weight of Concrete		150	pcf
Unit Weight of Soil Above Water Table		121.0	pcf
Unit Weight of Water		62.4	pcf
Unit Weight of Soil [Submerged]		58.6	pcf
Cohesion		0	psf
Friction Angle		33	°
Ultimate Skin Friction		819	psf
Ultimate Bearing Pressure		10,747	psf
Conical Failure Angle		30	°
Soil Uplift at ____ of Pad		Top	
Capacity Increase (Transient Loads)		1.00	
Bearing Strength Reduction Factor, ϕ_s		0.60	
Uplift Strength Reduction Factor, ϕ_s		0.75	

Soil Axial Capacities and Design Moment

Weight of Concrete [Buoyancy Considered]	40.7	k
Weight of Soil [Buoyancy Considered]	431.4	k
Skin Friction Resistance	85.2	k
Controlling Failure Mode	Top	
Compressive Force, P_u	177.6	k
Nominal Compressive Capacity per Leg, $\phi_s P_n$	1,089.8	k
$P_u / \phi_s P_n$	16.3%	
Inflection Point [BGL]	2.7	ft
Design Moment at Inflection Point, M_u	0.0	k-ft

Reactions

Moment, M_u	0.0	k-ft
Shear, V_u	1.9	k
Compression, P_u	162.7	k
Uplift, T_u	0.0	k



Pad Reinforcement Parameters

Concrete Compressive Strength, f'_c	3,000	psi
Pad Rebar Size #	8	
Pad Rebar Area	0.79	in ²
Pad Rebar Quantity [Lower]	26	
Pad Rebar Yield Strength, F_y	60	ksi
Pad Clear Cover	3	in
Bending Reduction Factor, ϕ_B	0.90	
Shear Reduction Factor, ϕ_V	0.75	
Compression Reduction Factor, ϕ_C	0.65	
Steel Elastic Modulus	29,000	ksi

Pad Reinforcement Capacities

Beta factor	0.85	
Lower Reinforcement Steel Area	20.54	
Lower Reinforcement Spacing	6.0	in
One Way Design Shear, V_u	44.3	k
One Way Shear Capacity, ϕV_c	268.6	k
$V_u / \phi V_c$	16.5%	
Punching Design Shear Stress, v_u	37.8	psi
Punching Shear Capacity, $\phi_c V_n$	164.3	psi
$v_u / \phi_c V_n$	23.0%	
Moment Transfer Flexural Ratio, γ_f	0.60	
Neutral Axis Depth	83.77	in
Moment Transfer Flexural Capacity, $\phi M_{sc,f}$	0	k-in
$\gamma_f M_{sc} / \phi M_{sc,f}$	0.0%	
Flexure Due to Soil Pressure, M_u	168.4	k-ft
Lower Steel Pad Moment Capacity, ϕM_n	1,751.6	k-ft
$M_u / \phi M_n$	9.6%	

Pier Reinforcement Parameters

Concrete Compressive Strength (f'_c)	3,000	psi
Pier Rebar Size #	8	
Pier Rebar Area	0.79	in ²
Pier Rebar Quantity	15	
Pier Rebar Yield Strength (F_y)	60	ksi
Tie Rebar Size #	5	
Tie Rebar Area (Single)	0.31	in ²
Tie Rebar Spacing	6.0	in
Tie Rebar Yield Strength (F_y)	60	ksi
Rebar Cage Diameter	27.75	in

Pier Reinforcement Capacities

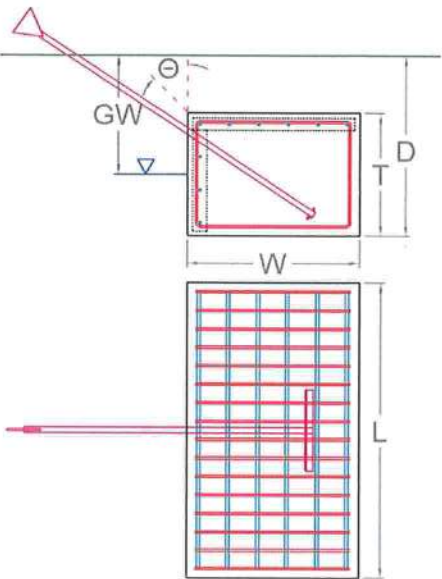
Design Moment (M_u)	0.0	k-ft
Nominal Moment Capacity ($\phi_B M_n$)	631.8	k-ft
$M_u / \phi_B M_n$	0.0%	
Design Shear (V_u)	1.9	k
Nominal Shear Capacity ($\phi_V V_n$)	262.2	k
$V_u / \phi_V V_n$	0.7%	
Design Compression (P_u)	162.7	k
Nominal Compression Capacity ($\phi_P P_n$)	1,703.7	k
$P_u / \phi_P P_n$	9.5%	
Pier Reinforcement Ratio	0.012	-



Guy Anchor Block Analysis (ANSI/TIA-222-H)

Anchor Block Parameters				
Include Berm?		N		
Analyze Anchor Rod?		N		
Ignore Rebar?		N		
Base Depth	D	12.0	ft	
Width	W	7.0	ft	
Length	L	35.0	ft	
Thickness	T	7.0	ft	
Water Table Depth [BGL]	GW	10	ft	
Unit Weight of Concrete		150	pcf	
Unit Weight of Soil Above Water Table		121.0	pcf	
Unit Weight of Water		62.4	pcf	
Unit Weight of Soil [Submerged]		58.6	pcf	
Friction Angle		33	°	
Cohesion		0	psf	
Ultimate Skin Friction		819	psf	
Coefficient of Shear Friction		0.50		
Conical Failure Angle	Θ	30	°	
Soil Uplift at _____ of Anchor		Top		
Capacity Increase (Transient Loads)		1.00		
Uplift Strength Reduction Factor, ϕ_u		0.75		
Shear Strength Reduction Factor, ϕ_v		0.75		
Dead Load Factor		0.90		

Reactions		
Uplift, T_u	67.1	k
Shear, V_u	65.2	k
Anchor Radius	180	ft
Node	A1	-



Soil Uplift Capacity		
Uplift Resistance from Skin Friction and Soil Shear	258.2	k
Nominal Uplift Resistance, $\phi_u T_n$	590.0	k
$T_u / \phi_u T_n$	11.4%	

Soil Shear Capacity		
Shear Resistance from Skin Friction	55.9	k
Shear Friction Resistance Due to Normal Force	135.2	k
Passive Pressure	3,489	psf
Passive Pressure Resistance	854.8	k
Nominal Shear Resistance, $\phi_v V_n$	784.4	k
$V_u / \phi_v V_n$	8.3%	



Strength Analysis of Reinforced Concrete

Concrete Compressive Strength, f'_c	3,000	psi
Rebar Size #	9	
Rebar Area (Single)	1.00	in ²
Rebar Quantity [Top]	6	
Rebar Quantity [Side]	6	
Rebar Yield Strength	60	ksi
Strength Reduction Factor for Shear, ϕ_v	0.75	
Strength Reduction Factor for Lateral Flexure, ϕ_{bv}	0.90	
Strength Reduction Factor for Vertical Flexure, ϕ_{bt}	0.90	
Compression Zone Factor, β_1	0.850	
One Way Shear due to Shear, V_u	26.4	k
One Way Shear Capacity due to Shear, $\phi_c V_n$	551.7	k
$V_u / \phi_v V_n$	4.8%	
One Way Shear due to Uplift, V_u	27.2	k
One Way Shear Capacity due to Uplift, $\phi_c V_n$	551.7	k
$V_u / \phi_v V_n$	4.9%	
Flexure due to Shear Load, M_{uv}	285.2	k-ft
Distance to steel, d_v	79.9	in
Whitney Block, a_v [Side]	1.681	in
Strain in tension rebar, ϵ_t	0.118	in/in
Flexural Capacity due to Shear, $\phi_{bv} M_{nv}$	2135.6	k-ft
Pad Flexure due to Uplift, M_{ut}	293.6	k-ft
Depth to steel, d_t	79.9	in
Whitney Block, a_t [Top]	1.681	in
Strain in tension rebar, ϵ_t	0.118	in/in
Flexural Capacity due to Uplift, $\phi_{bt} M_{nt}$	2135.6	k-ft
$M_u / \phi_b M_n$ (Max)	13.7%	

